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(71) Applicant(s)

Zeneca Limited

(Incorporated in the United Kingdom)

15 Stanhope Gate, LONDON, W1Y 6LN,
United Kingdom

(72) Inventor(s)

Alison Mary Smith

(74) Agent and/or Address for Service

Catherine Louise Mallalieu

Zeneca Agrochemicals, Intellectual Property Dept,
PO Box 3538, Jealott's Hill Research Station,
BRACKNELL, Berkshire, RG42 6YA, United Kingdom

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C62X C620 C623 C624 C625 C626 C627 C628 C634

(52), (56) and (58) continued overleaf

(54) Pesticidal heterocyclic and phenyl compounds

(57) A compound of formula (I),

$R-S(O)_nCH_2CH_2C(CH_3)=CF_2$

or a salt thereof, wherein n is 0, 1 or 2; and R is a heterocyclic or phenyl group, has nematocidal, insecticidal and acaricidal activity.

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(52) cont

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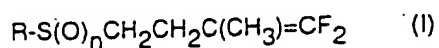
(56) Documents Cited
None

(58) Field of Search
UK CL (Edition N) C2C COL COM CON COS COT
INT CL⁶ C07C , C07D
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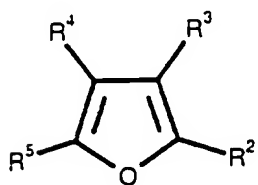
HETEROCYCLIC AND PHENYL COMPOUNDS

The present invention relates to novel heterocyclic and phenyl derivatives having nematocidal, insecticidal and acaricidal activity, to processes for their preparation, to compositions containing them, and to methods for killing or controlling nematode, insect or acarid pests using them.

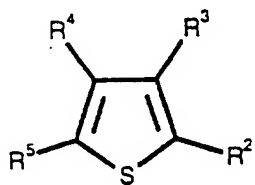
According to the present invention there is provided a compound of formula (I):



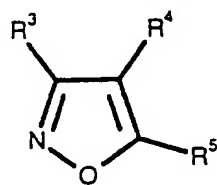
or a salt thereof, wherein n is 0, 1 or 2; and R is a group of formula (II) to (XXIV):



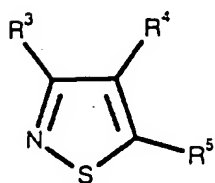
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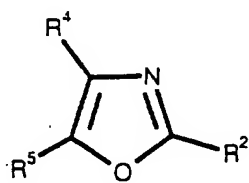
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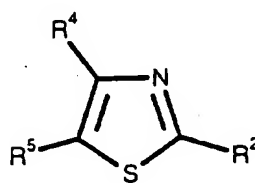
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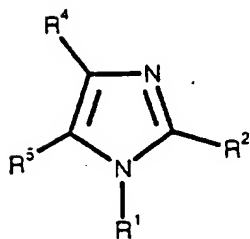
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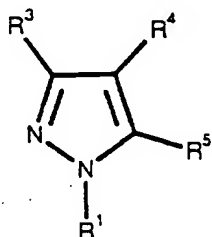
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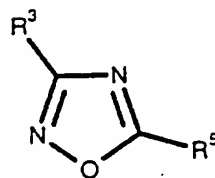
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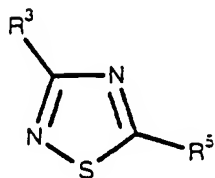
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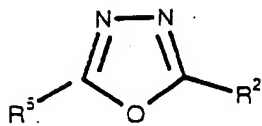
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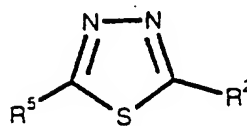
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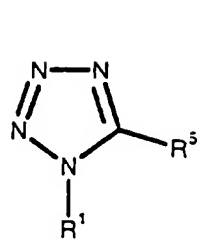
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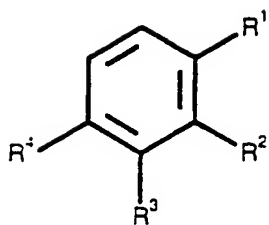
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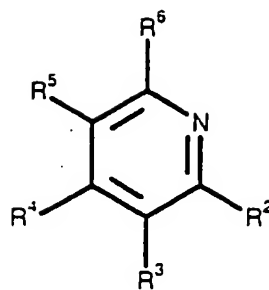
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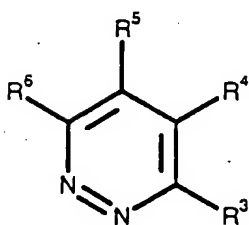
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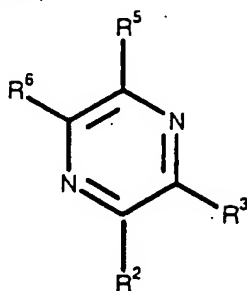
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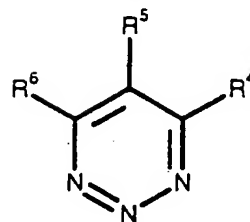
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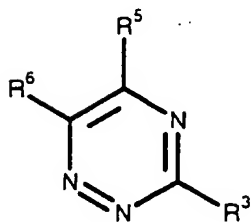
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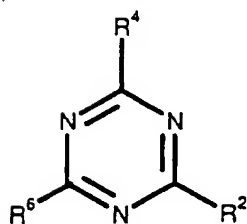
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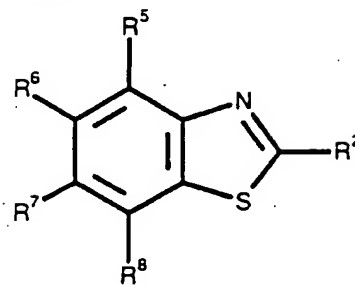
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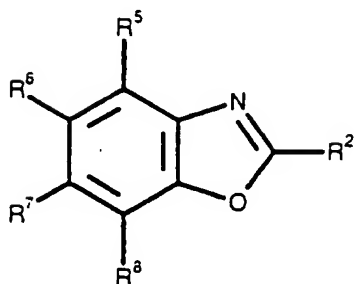
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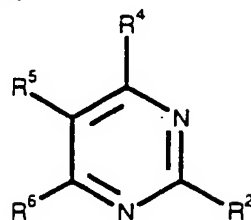
(XXI)



(XXII)



(XXIII)



(XXIV)

wherein:

the $\text{Si}(\text{O})_n\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)=\text{CF}_2$ group is at least one of R_1 (when attached to a carbon atom), R_2 , R_3 , R_4 , R_5 , R_6 , R_7 or R_8 :

R1 (when attached to a carbon atom), R2, R3, R4, R5, R6, R7 and R8 are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, alkynyl, cycloalkyl, alkylcycloalkyl, alkoxy, alkenyloxy, alkynyloxy, hydroxyalkyl, alkoxyalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted heteroarylalkyl, optionally substituted aryloxy, optionally substituted arylalkoxy, optionally substituted aryloxyalkyl, optionally substituted heteroaryloxy, optionally substituted heteroarylalkoxy, optionally substituted heteroaryloxyalkyl, haloalkyl, haloalkenyl, haloalkynyl, haloalkoxy, haloalkenyloxy, haloalkynyloxy, halogen, hydroxy, cyano, nitro, -NR8R9, -NR9COR10, -NR9CSR10, -NR9SO2R10, -N(SO2R9)(SO2R10), -COR9, -CONR9R10, -alkylCONR9R10, -CR9NR10, -COOR9, -OCOR9, -SR9, -SOR9, -SO2R9, -alkylSR9, -alkylSOR9, -alkylSO2R9, -OSO2R9, -SO2NR9R10, -CSNR9R10, -SiR9R10R10, -OCH2CO2R9, -OCH2CH2CO2R9, -CONR9SO2R10, -alkylCONR9SO2R10, -NHCONR9R10, -NHCSNR9R10, or an adjacent pair of R1, R2, R3, R4, R5, R6, R7 and R8 when taken together form a fused 5- or 6-membered carbocyclic or heterocyclic ring;

R1 (when attached to a nitrogen atom) is hydrogen, optionally substituted alkyl, cycloalkyl, alkylcycloalkyl, hydroxyalkyl, alkoxyalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted aryloxyalkyl, optionally substituted heteroaryl, optionally substituted heteroarylalkyl, optionally substituted heteroaryloxyalkyl, haloalkyl, hydroxy, cyano, nitro, -NR9R10, -NR9COR10, -NR9CSR10, -NR9COOR10, -NR9SO2R10, -N(SO2R9)(SO2R10), -COR9, -CONR9R10, -alkylCONR9R10, -CR9NR10, -COOR9, -OCOR9, -SOR9, -SO2R9, -alkylSR9, -alkylSOR9, -alkylSO2R9, -OSO2R9, -SO2NR9R10, -SR9, -SOR9, -SO2R9, -CSNR9R10, -SiR9R10R10, -OCH2CO2R9, -OCH2CH2CO2R9, -CONR9SO2R10, -alkylCONR9SO2R10, -NHCONR9R10, or -NHCSR9R10; and

R9, R10 and R11 are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, alkynyl, optionally substituted aryl, optionally substituted arylalkyl, haloalkyl, haloalkenyl, haloalkynyl, halogen, or hydroxy.

We would explain that, for ease of reference only, the substituents on the R group have been named in accordance with their position on this R group. For example, when R has the formula (II), substituents R2, R3, R4 and R5 are in positions 2, 3, 4, and 5, respectively, on the ring. For the avoidance of doubt, the -S(O)_nCH₂CH₂C(CH₃)=CF₂ group can be at any of the substituent positions indicated by R1 (when attached to a carbon atom) to R8.

When any one of R1 to R11 is an alkyl group, or contains an alkyl moiety, it may be straight or branched chain and is preferably C1-6 alkyl, even more preferably C1-4 alkyl, for example methyl, ethyl, propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl or t-butyl. When the alkyl group is acting as a "linking" group, ie R-alkyl-, for example in R-alkylSR8, C1-4 alkyl or C1-2 alkyl are particularly preferred.

When any one of R1 to R11 is a substituted alkyl group, or contains a substituted alkyl moiety, it may comprise one or more substituents chosen from halogen, nitro, cyano, -COOR9 or a salt thereof, hydroxy, alkoxy, alkoxyimino, alkoxy carbonyl, carbamoyl, mono- or di-alkylcarbamoyl, amino, mono- or di-alkylamino, acylamido (preferably C1-6 acylamido), alkanesulfonyl, and arylsulfonyl, which may itself be substituted with halogen, alkoxy or nitro.

When any one of R1 to R11 is an alkenyl or alkynyl group, or contains an alkenyl or alkynyl moiety, it may be straight or branched chain and is preferably C2-6 alkenyl or C2-6 alkynyl, even more preferably C2-4 alkenyl or C2-4 alkynyl, for example vinyl, allyl, but-3-enyl, 3-methyl-but-3-enyl, ethynyl or propargyl.

When any one of R1 to R11 is a substituted alkenyl group, or contains a substituted alkenyl moiety, it may comprise one or more substituents chosen from halogen, COOR9 or a salt thereof, hydroxy, nitro and cyano.

When any one of R1 to R8 is a cycloalkyl or alkylcycloalkyl group, or contains a cycloalkyl or alkylcycloalkyl moiety, it is preferably C3-6 cycloalkyl or C4-7 alkylcycloalkyl, for example, cyclopropyl, cyclopentyl, cyclohexyl or methylcyclopropyl.

When any one of R1 to R8 is an alkoxy, alkenyloxy, alkynyloxy or alkoxyalkyl group, or contains such a moiety, it is preferably C1-6 alkoxy, for example, methoxy, ethoxy, n-propoxy, iso-propoxy, n-butoxy, iso-butoxy, sec-butoxy and t-butoxy; C2-6 alkenyloxy, for example, vinyloxy, allyloxy, but-3-enyloxy and 3-methylbut-3-enyloxy; C2-6 alkynyloxy, for example, propargyloxy; C2-6 monoalkoxyalkyl, for example, methoxymethyl, methoxyethyl and ethoxymethyl; or C3-6 dialkoxyalkyl, for example, dimethoxymethyl and diethoxymethyl.

When any one of R1 to R11 is aryl, or contains an aryl moiety, it is preferably C6-10 aryl, more preferably it is phenyl. When any one of R1 to R11 is arylalkyl, it is preferably C6-10 aryl-methyl or C6-10 aryl-ethyl, even more preferably benzyl or phenethyl.

When any one of R1 to R8 is heteroaryl, or contains a heteroaryl moiety, it is preferably a 5 or 6 membered ring containing at least one O, N or S atom as the heteroatom, for example,

pyridine, pyrrole, pyrazine, furan or thiophene. When any one of R1 to R8 is heteroarylalkyl, it is preferably heteroaryl-C1-2 alkyl.

When any one of R1 to R11 is a substituted aryl, arylalkyl, heteroaryl, or heteroarylalkyl group, it may comprise one or more substituents chosen from alkyl, alkoxy, haloalkyl, haloalkoxy, halogen, hydroxy, COOR⁹ (or a salt thereof), aminosulfonyl, cyano or nitro. Examples of these groups are 4-methylphenyl, 4-chlorophenyl, 4-fluorophenyl, 4-nitrophenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4-aminosulfonylphenyl, 4-chlorobenzyl, 4-fluorobenzyl, 3-trifluoromethylbenzyl, 4-trifluoromethylbenzyl, 4-nitrobenzyl and 4-methylbenzyl.

When any one of R1 to R8 is a aryloxy or arylalkoxy group, it is preferably phenoxy, benzyloxy or phenethoxy.

When any one of R1 to R8 is a substituted aryloxy, arylalkoxy, heteroaryloxy or heteroarylalkoxy group, it may comprise one or more substituents chosen from alkyl, alkoxy, halogen, haloalkyl, haloalkoxy, hydroxy, cyano or nitro. Examples of these groups are 4-methylphenoxy, 4-chlorophenoxy, 4-fluorophenoxy, 4-nitrophenoxy, 3-trifluoromethylphenoxy, 4-trifluoromethylphenoxy, 4-chlorobenzyloxy, 4-fluorobenzyloxy, 3-trifluoromethylbenzyloxy, 4-trifluoromethylbenzyloxy, 4-nitrobenzyloxy and 4-methylbenzyloxy.

When any one of R1 to R11 is halogen, or contains a halogen moiety, it is preferably fluorine, chlorine, bromine or iodine. Even more preferably, it is fluorine, chlorine or bromine.

When any one of R1 to R11 is a haloalkyl, haloalkenyl or haloalkynyl group, it may contain one or more halogen atoms, preferably chlorine, fluorine or bromine. Examples of these groups are fluoromethyl, difluoromethyl, trifluoromethyl, chloromethyl, dichloromethyl, trichloromethyl, 2-fluoroethyl, 2,2,2-trifluoroethyl, pentafluoroethyl, 2,2-difluoroethenyl, 3,3-dichloroprop-2-enyl, 2-chloroprop-2-enyl, 3,4,4-trifluorobut-3-enyl, 4-fluorobut-3-enyl, 4,4-difluorobut-3-enyl and 3-methyl-4,4-difluorobut-3-enyl.

When any one of R1 to R8 is a haloalkoxy group, a haloalkenyloxy group or a haloalkynyloxy group, it may contain one or more halogen atoms, preferably chlorine, fluorine or bromine. Examples of the preferred C1-6 alkoxy, C2-6 alkenyloxy and C2-6 alkynyloxy groups are trichloromethoxy, fluoromethoxy, difluoromethoxy, trifluoromethoxy, 2-fluoroethoxy, 2,2,2-trifluoroethoxy, pentafluoroethoxy, 1,1,2,2-tetrafluoroethoxy, 2,2-difluoroethenyloxy, 3,4,4-trifluorobut-3-enyloxy, 4-fluorobut-3-enyloxy, 4,4-difluorobut-3-enyloxy, 3-methyl-4,4-difluorobut-3-enyloxy, 2-chloroprop-2-enyloxy and 3,3-dichloroprop-2-enyloxy.

When any one of R1 to R8 is the group -NR₉R₁₀, it is preferably -NH₂; a mono-alkylamino group, for example, methylamino and ethylamino; or a di-alkylamino group, for example, dimethylamino and diethylamino.

When any one of R1 to R8 is the group -NR₉COR₁₀, it is preferably -NHCHO; a C₂-6 acylamino group, for example -NHCOCH₃, -NHCOC₂H₅; or benzamido, which may be substituted with one or more substituents chosen from halogen, for example, chlorine, fluorine and bromine; alkyl, for example, methyl and ethyl; alkoxy, for example, methoxy and ethoxy; haloalkyl, for example, chloromethyl, fluoromethyl, trifluoromethyl and 2,2,2-trifluoroethyl; haloalkoxy, for example, trifluoromethoxy and 2,2,2-trifluoroethoxy; hydroxy; cyano and nitro.

When any one of R1 to R8 is -NR₉CSR₁₀, R₉ and R₁₀ are preferably alkyl, for example methyl and ethyl.

When any one of R1 to R8 is the group -NR₉SO₂R₁₀, it is preferably an alkanesulfonamido group, for example, -NHSO₂CH₃ and -NHSO₂C₂H₅.

When any one of R1 to R8 is the group -N(SO₂R₉)(SO₂R₁₀), it is preferably a di-(alkanesulfonyl)amino group, for example, -N(SO₂CH₃)₂ and -N(SO₂C₂H₅)₂.

When any one of R1 to R8 is the group -COR₉, it is preferably a C₁-6 acyl group; or an optionally substituted benzoyl group. The benzoyl may be substituted with one or more substituents chosen from halogen, for example, chlorine, fluorine and bromine; alkyl, for example, methyl and ethyl; alkoxy, for example, methoxy and ethoxy; haloalkyl, for example, chloromethyl, fluoromethyl, trifluoromethyl and 2,2,2-trifluoroethyl; haloalkoxy, for example, trifluoromethoxy and 2,2,2-trifluoroethoxy; hydroxy; cyano and nitro. Examples of preferred -COR₈ groups are aceryl, propionyl, n-butanoyl, 4-chlorobenzoyl, 4-fluorobenzoyl, 4-bromobenzoyl, 4-methylbenzoyl and 4-trifluoromethylbenzoyl.

When any one of R1 to R8 is the group -CONR₉R₁₀, it is preferably -CONH₂; an N-alkyl-carboxamido group, for example -CONHCH₃, -CONHC₂H₅ and -CONHCH₂CH₂CH₃; or an N,N-dialkyl-carboxamido group, for example -CON(CH₃)₂, -CON(CH₃)(C₂H₅) and -CON(C₂H₅)₂.

When any one of R1 to R8 is the group -alkylCONR₉R₁₀, it is preferably -C₁-4 alkylCONR₉R₁₀.

When any one of more of R1 to R8 is the group -CR₉NR₁₀, it is preferably -CH=NOH.

When any one of R1 to R8 is the group -COOR₉, it is preferably -COOH; an alkoxycarbonyl group, for example methoxycarbonyl and ethoxycarbonyl; or a

haloalkenyloxycarbonyl group, for example 3,4,4-trifluorobut-3-enyloxycarbonyl, 4-fluorobut-3-enyloxycarbonyl, 4,4-difluorobut-3-enyloxycarbonyl and 3-methyl-4,4-difluorobut-3-enyloxycarbonyl.

When any one of R1 to R8 is the group -OCOR9, it is preferably a C2-6 acyloxy group, for example -OCOCH3 and -OCOC2H5; or an optionally substituted benzoyloxy group. The benzoyloxy group may comprise one or more substituents chosen from halogen, for example, chlorine, fluorine and bromine; alkyl, for example, methyl and ethyl; alkoxy, for example, methoxy and ethoxy; haloalkyl, for example, chloromethyl, fluoromethyl, trifluoromethyl and 2,2,2-trifluoroethyl; haloalkoxy, for example, trifluoromethoxy and 2,2,2-trifluoroethoxy; hydroxy; cyano; and nitro.

When any one of R1 to R8 is the group -SR9, R9 is preferably hydrogen, optionally substituted alkyl, optionally substituted alkenyl, alkynyl, haloalkyl, haloalkenyl, haloalkynyl, optionally substituted aryl, or optionally substituted arylalkyl. Examples of the preferred C1-6 alkylthio (C1-4 alkyl being especially preferred), C2-6 alkenylthio or C2-6 alkynylthio groups are methylthio, ethylthio, n-propylthio, iso-propylthio, n-butylthio, iso-butylthio, sec-butylthio, t-butylthio, allylthio, but-3-enylthio, 3-methylbut-3-enylthio and propargylthio. Examples of the preferred C1-6 haloalkylthio (C1-4 alkyl being especially preferred), C2-6 haloalkenylthio or C2-6 haloalkynylthio groups are fluoromethylthio, difluoromethylthio, trifluoromethylthio, trichloromethylthio, 2-fluoroethylthio, 2,2,2-trifluoroethylthio, 3-fluoro-n-propylthio, pentafluoroethylthio, 2-chloroprop-2-enylthio, 3,3-dichloroprop-2-enylthio, 3,4,4-trifluorobut-3-enylthio, 4-fluorobut-3-enylthio, 4,4-difluorobut-3-enylthio and 3-methyl-4,4-difluorobut-3-enylthio. An example of the preferred C6-10 arylthio and C6-10 aryl-C1-2alkylthio groups is 3-trifluoromethylbenzylthio.

When any one of R1 to R8 is the group -SOR9, it is preferably an alkanesulfinyl, alkenylsulfinyl or alkynylsulfinyl group, for example methanesulfinyl or ethanesulfinyl; or a haloalkanesulfinyl, haloalkenylsulfinyl or haloalkynylsulfinyl group, for example trifluoromethanesulfinyl. In another preferred embodiment -SOR9 is preferably -SOF, -SOBr or -SOCl.

When any one of R1 to R8 is the group -SO2R9, it is preferably an alkanesulfonyl, alkenylsulfonyl, alkynylsulfonyl, a haloalkanesulfonyl, haloalkenylsulfonyl, haloalkynylsulfonyl group; or an optionally substituted benzenesulfonyl group. The benzenesulfonyl group may comprise one or more substituents chosen from halogen, for example, chlorine, fluorine and

bromine; alkyl, for example, methyl and ethyl; alkoxy, for example, methoxy and ethoxy; haloalkyl, for example, chloromethyl, fluoromethyl, trifluoromethyl and 2,2,2-trifluoroethyl; haloalkoxy such as trifluoromethoxy and 2,2,2-trifluoroethoxy; hydroxy; cyano and nitro. Examples of such groups are methanesulfonyl, ethanesulfonyl, trifluoromethanesulfonyl, and 4-methylbenzenesulfonyl. In another preferred embodiment -SO₂R₉ is preferably -SO₂F, -SO₂Br or -SO₂Cl.

It will thus be appreciated that the R group of formula (II) to (XXIV) can comprise more than one -S(O)_nCH₂CH₂C(CH₃)=CF₂ group. Preferably the R group contains one or two such substituents.

When any one of R₁ to R₈ is the group -OSO₂R₉, it is preferably an alkanesulfonyloxy group or an optionally substituted benzenesulfonyloxy group. The benzenesulfonyl may be substituted with one or more substituents chosen from halogen, for example, chlorine, fluorine and bromine; alkyl, for example, methyl and ethyl; alkoxy, for example, methoxy and ethoxy; haloalkyl, for example, chloromethyl, fluoromethyl, trifluoromethyl and 2,2,2-trifluoroethyl; haloalkoxy, for example, trifluoromethoxy and 2,2,2-trifluoroethoxy; hydroxy; cyano; and nitro.

When any one of R₁ to R₈ is the group -SO₂NR₉R₁₀, it is preferably -SO₂NH₂; an alkylaminosulfonyl group, for example, -SO₂NHCH₃ and -SO₂NHC₂H₅; or a dialkylaminosulfonyl group, for example, -SO₂N(CH₃)₂ and -SO₂N(C₂H₅)₂.

When any one of R₁ to R₈ is the group -CSNR₉R₁₀ it is preferably -CSNH₂, -CSNHCH₃ or -CSN(CH₃)₂.

When any one of R₁ to R₈ is the group -SiR₉R₁₀R₁₁, it is preferably a trialkylsilyl group, for example, trimethylsilyl and triethylsilyl.

When any one of R₁ to R₈ is the group -OCH₂CO₂R₉, it is preferably an alkoxycarbonylmethoxy group, for example, methoxycarbonylmethoxy and ethoxycarbonylmethoxy.

When any one of R₁ to R₈ is the group -OCH₂CH₂CO₂R₉, it is preferably a alkoxycarbonylethoxy group, for example, methoxycarbonylethoxy and ethoxycarbonylethoxy.

When any one of R₁ to R₈ is the group -CONR₉SO₂R₁₀, it is preferably an N-alkanesulfonylcarboxamido group or an N-alkyl-N-alkanesulfonylcarboxamido group, for example, N-(methanesulfonyl)-carboxamido and N-methyl-N-(methanesulfonyl)carboxamido.

When any one or more of R₁ to R₈ is the group -alkylCONR₉SO₂R₁₀, R₉ and R₁₀ are preferably alkyl groups, for example, ethyl and methyl.

When any one of R1 to R8 is -NHCONR9R10, R9 and R10 are preferably alkyl groups, for example, ethyl and methyl.

When any one of R1 to R8 is -NHCSNR9R9, R9 and R10 are preferably alkyl groups, for example, ethyl and methyl.

When an adjacent pair of R1, R2, R3, R4, R5, R6, R7 and R8 taken together form a fused 5- or 6-membered carbocyclic or heterocyclic ring, preferably containing two oxygen atoms, the pair of substituents taken together is preferably -(CH2)3-, -(CH2)4-, -CH=CH-CH=CH-, -O-CH2-O-, optionally substituted with one or two halogen atoms or methyl groups, for example -O-CHF-O- or -O-CF2-O-, -O-CH(CH3)-O-, -O-C(CH3)2-O- or -O-(CH2)2-O-.

According to an especially preferred embodiment of the present invention R1 (when attached to a carbon atom) to R8 are each independently hydrogen; nitro; halogen; cyano; -CH=NOH; C1-4 alkyl; C1-4 haloalkyl; C1-4 alkenyl; C1-4 haloalkenyl; cyclopropyl; hydroxy; C1-4 alkoxy; C2-4 alkoxyalkyl; -COOH; C2-4 alkoxy carbonyl; C2-4 haloalkenyloxy carbonyl; -CONH2; mono or di-C1-2 alkylaminocarbonyl; C2-4 alkanecarbonyl; -CONHSO2 C1-4 alkyl, preferably -CONHSO2CH3; phenyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl, C1-4 alkoxy or aminosulfonyl; benzyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl or C1-4 alkoxy; phenoxy optionally mono- or di- substituted with groups independently chosen from halogen, cyano, C1-4 alkyl or C1-4 alkoxy; amino optionally mono- or di- substituted with C1-4 alkyl groups; -SH; C1-4 alkylthio; benzylthio optionally mono- or di- substituted with groups independently chosen from halogen or C1-4 haloalkyl; C1-4 alkenylthio; C2-4 haloalkenylthio; a second S(O)nCH2CH2CH=CF2 group; C1-4 alkanesulfonyl; C1-4 haloalkanesulfonyl; fluorosulfonyl; mono- or di- C1-4 alkylsulfamoyl; a 5 or 6 membered heteroaryl group, for example, furyl, pyrazinyl, pyridinyl or thienyl, optionally substituted with halogen; or any adjacent pair forms a fused 5- or 6- carbocyclic or heterocyclic ring; and

R1 (when attached to a nitrogen atom) is hydrogen; nitro; cyano; -CH=NOH; C1-4 alkyl; C1-4 haloalkyl; cyclopropyl; hydroxy; -COOH; C2-4 alkoxy carbonyl; C2-4 haloalkenyloxy carbonyl; -CONH2; mono or di-C1-2 alkylaminocarbonyl; C2-4 alkanecarbonyl; -CONHSO2 C1-4 alkyl, preferably -CONHSO2CH3; phenyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl, C1-4 alkoxy or aminosulfonyl; benzyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl or C1-4 alkoxy; phenoxy optionally mono- or di- substituted with groups

independently chosen from halogen, cyano, C1-4 alkyl or C1-4 alkoxy; amino optionally mono- or di- substituted with C1-4 alkyl groups; -SH; C1-4 alkylthio; benzylthio optionally mono- or di- substituted with groups independently chosen from halogen or C1-4 haloalkyl; C1-4 alkenylthio; C2-4 haloalkenylthio; a second $S(O)_nCH_2CH_2C(CH_3)=CF_2$ group; C1-4 alkanesulfonyl; C1-4 haloalkanesulfonyl; fluorosulfonyl; mono- or di- C1-4 alkylsulfamoyl; a 5 or 6 membered heteroaryl group, for example, furyl, pyrazinyl, pyridinyl or thienyl, optionally substituted with halogen.

The following Tables give examples of compounds according to the invention.

Examples of compounds of Formula (II) according to the invention are set out in Table II.

TABLE II

No.	R2	R3	R4	R5
II.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H
II.2	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H
II.3	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H
II.4	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CH ₃
II.5	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CH ₃
II.6	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CH ₃
II.7	2-CH ₃	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
II.8	2-CH ₃	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
II.9	2-CH ₃	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H

Examples of compounds of Formula (III) according to the invention are set out in Table III.

TABLE III

No.	R2	R3	R4	R5
III.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H
III.2	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H

III.3	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H
III.4	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CHO
III.5	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CH ₂ OH
III.6	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	(E) 5-CH=NOH
III.7	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	(Z) 5-CH=NOH
III.8	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CN
III.9	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-COCH ₃
III.10	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=CH-CH=CH-	
III.11	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=CH-CH=CH-	
III.12	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=CH-CH=CH-	

Examples of compounds of Formula (IV) according to the invention are set out in Table IV.

TABLE IV

No.	R ₃	R ₄	R ₅
IV.1	3-C ₆ H ₅	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.2	3-C ₆ H ₅	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
IV.3	3-C ₆ H ₅	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
IV.4	3-CN	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.5	3-Cl	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.6	3-CF ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.7	3-CH ₃	4-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.8	3-CH ₃	4-COOCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.9	3-CH ₃	4-COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.10	3-CH ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.11	3-H	4-Cl	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.12	3-H	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.13	3-H	4-CN	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
IV.14	3-H	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
IV.15	3-H	4-CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

IV.16	3-H	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.17	3-H	4-NO ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.18	3-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
IV.19	3-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
IV.20	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl
IV.21	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-Cl	5-H
IV.22	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
IV.23	3-(5-Cl-Fur-2-yl)	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.24	3-(5-Cl-Fur-2-yl)	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
IV.25	3-(Thien-2-yl)	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
IV.26	3-(Thien-2-yl)	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂

Examples of compounds of Formula (V) according to the invention are set out in Table V.

TABLE V

No.	R ₃	R ₄	R ₅
V.1	3-CF ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
V.2	3-Cl	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
V.3	3-Cl	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
V.4	3-Cl	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
V.5	3-H	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
V.6	3-H	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
V.7	3-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
V.8	3-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
V.9	3-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
V.10	3-NO ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
V.11	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-Cl	5-H
V.12	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
V.13	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
V.14	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂

V.15	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
V.16	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl

Examples of compounds of Formula (VI) according to the invention are set out in Table VI.

TABLE VI

No.	R ₂	R ₄	R ₅
VI.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VI.2	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VI.3	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VI.4	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CF ₃	5-H
VI.5	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CF ₃	5-H
VI.6	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-H
VI.7	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-H
VI.8	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CONH ₂	5-H
VI.9	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-H
VI.10	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-H
VI.11	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-COOH	5-H
VI.12	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Br
VI.13	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl
VI.14	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl
VI.15	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-Cl
VI.16	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-Cl
VI.17	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-F
VI.18	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-C ₆ H ₅
VI.19	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-C ₆ H ₅
VI.20	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-C ₆ H ₅
VI.21	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CF ₃
VI.22	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CN
VI.23	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CN

VI.24	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CN
VI.25	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CN
VI.26	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CN
VI.27	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CN
VI.28	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOCH ₂ CH ₃
VI.29	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOCH ₂ CH ₃
VI.30	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOCH ₂ CH ₃
VI.31	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CF ₃	5-COOCH ₂ CH ₃
VI.32	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOCH ₃
VI.33	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOCH ₃
VI.34	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOCH ₃
VI.35	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOH
VI.36	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CF ₃	5-COOH
VI.37	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOH
VI.38	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CONHSO ₂ CH ₃
VI.39	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CONH ₂
VI.40	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CONH ₂
VI.41	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CONH ₂
VI.42	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VI.43	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VI.44	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VI.45	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ F
VI.46	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ F
VI.47	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ NH ₂
VI.48	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ NH ₂
VI.49	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Br
VI.50	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
VI.51	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
VI.52	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
VI.53	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
VI.54	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VI.55	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl

VI.56	2-H	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VI.57	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VI.58	2-CH ₃	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VI.59	2-CH ₃	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VI.60	2-CH ₃	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VI.61	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
VI.62	2-CH ₃	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
VI.63	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃
VI.64	2-CH ₃	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
VI.65	2-CH ₃	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
VI.66	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOH
VI.67	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-F
VI.68	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
VI.69	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
VI.70	2-H	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H
VI.71	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂
VI.72	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ F
VI.73	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NH ₂
VI.74	2-H	4-Br	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.75	2-H	4-C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.76	2-H	4-CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.77	2-H	4-CF ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.78	2-H	4-Cl	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.79	2-H	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.80	2-H	4-CN	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.81	2-H	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.82	2-CH ₃	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.83	2-H	4-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.84	2-H	4-CONH ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.85	2-H	4-CONH ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.86	2-CH ₃	4-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.87	2-H	4-COOCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

VI.88	2-H	4-COOCH ₂ CH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.89	2-H	4-COOCH ₂ CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.90	2-CH ₃	4-COOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.91	2-H	4-COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.92	2-H	4-F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.93	2-H	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.94	2-H	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.95	2-H	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.96	2-H	4-NO ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.97	2-H	4-NO ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.98	2-H	4-SO ₂ F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.99	2-H	4-SO ₂ NH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.100	2-Br	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.101	2-C ₆ H ₅	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.102	2-C ₆ H ₅	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.103	2-C ₆ H ₅	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.104	2-CF ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.105	2-CF ₃	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.106	2-Cl	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.107	2-CN	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.108	2-CN	4-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.109	2-CONH ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.110	2-CONH ₂	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.111	2-CONH ₂	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.112	2-CONH ₂	4-CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VI.113	2-COOCH ₂ CH ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.114	2-COOCH ₃	4-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.115	2-COOH	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.116	2-F	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.117	2-F	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VI.118	2-NO ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.119	2-SO ₂ F	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

VI.120	2-SO ₂ NH ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VI.121	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-C ₆ H ₅	5-H
VI.122	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-C ₆ H ₅	5-H
VI.123	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-C ₆ H ₅	5-H

Examples of compounds of Formula (VII) according to the invention are set out in Table VII.

TABLE VII

No.	R ₂	R ₄	R ₅
VII.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VII.2	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VII.3	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VII.4	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CF ₃	5-H
VII.5	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CF ₃	5-H
VII.6	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CN	5-H
VII.7	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CONH ₂	5-H
VII.8	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-H
VII.9	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-H
VII.10	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-COOH	5-H
VII.11	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-Br
VII.12	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-Br
VII.13	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-COOH	5-Br
VII.14	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Br
VII.15	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Br
VII.16	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Br
VII.17	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-C ₆ H ₅
VII.18	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-C ₆ H ₅
VII.19	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-C ₆ H ₅
VII.20	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CF ₃
VII.21	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CH ₃
VII.22	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CH ₃

VII.23	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CH ₃
VII.24	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl
VII.25	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl
VII.26	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Cl
VII.27	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-Cl
VII.28	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-Cl
VII.29	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CN
VII.30	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CN
VII.31	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CN
VII.32	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CN
VII.33	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CN
VII.34	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CN
VII.35	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CONH ₂
VII.36	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CONH ₂
VII.37	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CONH ₂
VII.38	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOCH ₂ CH ₃
VII.39	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOCH ₂ CH ₃
VII.40	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOCH ₂ CH ₃
VII.41	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOCH ₃
VII.42	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOCH ₃
VII.43	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOCH ₃
VII.44	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-COOH
VII.45	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-COOH
VII.46	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-F
VII.47	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VII.48	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VII.49	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VII.50	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ F
VII.51	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ F
VII.52	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-SO ₂ F
VII.53	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-SO ₂ F
VII.54	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ NH ₂

VII.55	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ NH ₂
VII.56	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-SO ₂ N(CH ₂ CH ₃) ₂
VII.57	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
VII.58	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
VII.59	2-H	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H
VII.60	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Br
VII.61	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
VII.62	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
VII.63	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
VII.64	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
VII.65	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VII.66	2-H	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VII.67	2-H	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VII.68	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VII.69	2-CH ₃	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VII.70	2-CH ₃	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VII.71	2-CH ₃	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VII.72	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
VII.73	2-CH ₃	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
VII.74	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃
VII.75	2-CH ₃	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
VII.76	2-CH ₃	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
VII.77	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOH
VII.78	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-F
VII.79	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂
VII.80	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ F
VII.81	2-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NH ₂
VII.82	2-H	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.83	2-H	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.84	2-H	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.85	2-H	4-Br	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.86	2-H	4-C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

VII.87	2-H	4-CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.88	2-H	4-CF ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.89	2-H	4-Cl	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.90	2-H	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.91	2-H	4-CN	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.92	2-H	4-CN	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.93	2-CH ₃	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.94	2-H	4-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.95	2-H	4-CONH ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.96	2-H	4-CONH ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.97	2-CH ₃	4-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.98	2-H	4-COOCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.99	2-H	4-COOCH ₂ CH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.100	2-H	4-COOCH ₂ CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.101	2-CH ₃	4-COOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.102	2-H	4-COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.103	2-H	4-F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.104	2-H	4-NO ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.105	2-H	4-NO ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.106	2-H	4-SO ₂ F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.107	2-H	4-SO ₂ NH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.108	2-Br	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.109	2-C ₆ H ₅	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.110	2-C ₆ H ₅	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.111	2-C ₆ H ₅	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.112	2-CF ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.113	2-CF ₃	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.114	2-Cl	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.115	2-Cl	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.116	2-Cl	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.117	2-CN	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.118	2-CN	4-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

VII.119	2-CONH ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.120	2-CONH ₂	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.121	2-CONH ₂	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.122	2-CONH ₂	4-CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VII.123	2-COOCH ₂ CH ₃	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.124	2-COOCH ₃	4-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.125	2-COOH	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.126	2-F	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.127	2-F	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VII.128	2-NH ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.129	2-NO ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.130	2-O(4-CN-C ₆ H ₄)	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.131	2-SO ₂ F	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.132	2-SO ₂ NH ₂	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.133	2-S-(2)-(5-Cl Thiazole)	4-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VII.134	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-dihydro	5-dihydro

Examples of compounds of Formula (VIII) according to the invention are set out in Table VIII.

TABLE VIII

No.	R1	R2	R4	R5
VIII.1	1-H	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.2	1-H	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.3	1-C ₆ H ₅	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.4	1-C ₆ H ₅	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.5	1-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.6	1-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.7	1-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.8	1-CH ₂ CH ₂ CHClCF ₂	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.9	1-CH ₂ CH ₂ CHClCF ₂	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.10	1-CH ₂ CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.11	1-CH ₂ CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.12	1-CH ₂ CH ₂ CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.13	1-CH ₂ CH ₂ CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.14	1-CH(CH ₃) ₂	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.15	1-CH(CH ₃) ₂	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.16	1-C(CH ₃) ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H

VIII.17	1-C(CH ₃) ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.18	1-SO ₂ CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H
VIII.19	1-H	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-C6H ₅	5-H
VIII.20	1-H	2-SOCl ₂ CH ₂ C(CH ₃)CF ₂	4-C6H ₅	5-H
VIII.21	1-H	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-C6H ₅	5-H
VIII.22	1-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-C6H ₅	5-H
VIII.23	1-CH ₃	2-SOCl ₂ CH ₂ C(CH ₃)CF ₂	4-C6H ₅	5-H
VIII.24	1-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-C6H ₅	5-H
VIII.25	1-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-Br
VIII.26	1-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CF ₃
VIII.27	1-H	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₂ CH ₃	5-CH ₃
VIII.28	1-H	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₂ CH ₃	5-CH ₃
VIII.29	1-H	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CH ₃
VIII.30	1-H	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CH ₃
VIII.31	1-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CH ₃
VIII.32	1-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CH ₃
VIII.33	1-CH ₂ CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CH ₃
VIII.34	1-CH ₂ CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-CH ₃
VIII.35	1-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CH ₃
VIII.36	1-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CH ₃
VIII.37	1-CH(CH ₃) ₂	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-CH ₃

VIII.38	I-CH(CI13)2	2-SO2CH12CH12C(CI13)CF2	4-II	5-CI13
VIII.39	I-CI13	2-SCH12CH12C(CI13)CF2	4-II	5-Cl
VIII.40	I-CI13	2-SO2CH12CH12C(CI13)CF2	4-II	5-Cl
VIII.41	I-CI13	2-SCH12CH12C(CI13)CF2	4-II	5-CN
VIII.42	I-CI13	2-SOCH12CH12C(CI13)CF2	4-II	5-CN
VIII.43	I-CI13	2-SO2CH12CH12C(CI13)CF2	4-II	5-CN
VIII.44	I-CI13	2-SCH12CH12C(CI13)CF2	4-CI13	5-CN
VIII.45	I-CI13	2-SOCH12CH12C(CI13)CF2	4-CI13	5-CN
VIII.46	I-CI13	2-SO2CH12CH12C(CH3)CF2	4-CI13	5-CN
VIII.47	I-CI13	2-SCH12CH12C(CH3)CF2	4-II	5-CONH2
VIII.48	I-CI13	2-SCH12CH12C(CH3)CF2	4-CH3	5-CONH2
VIII.49	I-CI13	2-SOCH12CH12C(CH3)CF2	4-CI13	5-CONH2
VIII.50	I-II	2-SOCH12CH12C(CI13)CF2	4-II	5-COOCH12CI13
VIII.51	I-II	2-SO2CH12CH12C(CI13)CF2	4-II	5-COOCH12CI13
VIII.52	I-CI13	2-SCH12CH12C(CI13)CF2	4-II	5-COOCH12CI13
VIII.53	I-CI13	2-SO2CH12CH12C(CI13)CF2	4-II	5-COOCH12CI13
VIII.54	I-CI13	2-SCH12CH12C(CI13)CF2	4-II	5-COOH
VIII.55	I-CI13	2-SCH12CH12C(CI13)CF2	4-CH12CI13	5-COOCH13
VIII.56	I-CI13	2-SO2CH12CH12C(CI13)CF2	4-CH2CI13	5-COOCH13
VIII.57	I-CI13	2-SCH12CH12C(CH3)CF2	4-II	5-F
VIII.58	I-II	2-SCH12CH12C(CI13)CF2	4-CI13	5-II

VIII.59	I-II	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-II
VIII.60	I-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-II
VIII.61	I-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-II
VIII.62	I-CH ₂ (CH ₃) ₂	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-II
VIII.63	I-CH ₂ (CH ₃) ₂	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	5-II
VIII.64	I-II	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-II
VIII.65	I-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-II
VIII.66	I-CH ₃	2-SOCl ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-II
VIII.67	I-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₂ CH ₃	5-II
VIII.68	I-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-COOCH ₃	5-CH ₂ CH ₃
VIII.69	I-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VIII.70	I-CH ₃	2-SOCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VIII.71	I-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-NO ₂
VIII.72	I-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ F
VIII.73	I-CH ₃	2-SOCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ F
VIII.74	I-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ NH ₂
VIII.75	I-CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-SO ₂ NH ₂
VIII.76	I-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H
VIII.77	I-CH ₃	2-II	4-SOCl ₂ CH ₂ C(CH ₃)CF ₂	5-II
VIII.78	I-CH ₃	2-II	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-II
VIII.79	I-CH ₃	2-II	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-CN

VIII.80	1-CH ₃	2-CH ₃	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VIII.81	1-CH ₃	2-CH ₃	4-SOCl ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VIII.82	1-CH ₃	2-CH ₃	4-SO ₂ Cl ₂ CH ₂ C(CH ₃)CF ₂	5-CN
VIII.83	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
VIII.84	1-CH ₃	2-H	4-SOCl ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
VIII.85	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃
VIII.86	1-CH ₃	2-CH ₃	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃
VIII.87	1-CH ₃	2-CH ₃	4-SO ₂ Cl ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃
VIII.88	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-COOH
VIII.89	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
VIII.90	1-CH ₃	2-CH ₃	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
VIII.91	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VIII.92	1-CH ₃	2-H	4-SOCl ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VIII.93	1-CH ₃	2-H	4-SO ₂ Cl ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
VIII.94	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-F
VIII.95	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-Br
VIII.96	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NH ₂
VIII.97	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ F
VIII.98	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂
VIII.99	1-CH ₃	2-H	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
VIII 100	1-CH ₃	2-H	4-SOCl ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃

VIII.101	1-CH ₃	2-II	4-II	5-SCI ₂ CH ₂ C(CH ₃)CF ₂
VIII.102	1-CH ₃	2-II	4-II	5-SOCI ₂ CH ₂ C(CH ₃)CF ₂
VIII.103	1-CH ₃	2-II	4-II	5-SO ₂ CI ₂ CH ₂ C(CH ₃)CF ₂
VIII.104	1-CH ₃	2-II	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.105	1-CH ₃	2-II	4-CN	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.106	1-CH ₃	2-II	4-CN	5-SO ₂ CI ₂ CH ₂ C(CH ₃)CF ₂
VIII.107	1-CH ₃	2-CH ₃	4-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.108	1-CH ₃	2-II	4-C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.109	1-CH ₃	2-II	4-COOCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.110	1-CH ₃	2-II	4-COOCH ₂ CH ₃	5-SOCI ₂ CH ₂ C(CH ₃)CF ₂
VIII.111	1-CH ₃	2-II	4-COOCH ₂ CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VIII.112	1-CH ₃	2-CH ₃	4-COOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.113	1-CH ₃	2-II	4-COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.114	1-CH ₃	2-II	4-CONH ₂	5-SCI ₂ CH ₂ C(CH ₃)CF ₂
VIII.115	1-CH ₃	2-II	4-CONH ₂	5-SOCI ₂ CH ₂ C(CH ₃)CF ₂
VIII.116	1-CH ₃	2-II	4-CONH ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VIII.117	1-CH ₃	2-CH ₃	4-CONH ₂	5-SCI ₂ CH ₂ C(CH ₃)CF ₂
VIII.118	1-CH ₃	2-II	4-Cl	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.119	1-CH ₃	2-II	4-F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.120	1-CH ₃	2-II	4-Br	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.121	1-CH ₃	2-II	4-SO ₂ NH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

VIII.122	1-CH3	2-II	4-SO2F	5-SClH2CH2C(CH3)CF2
VIII.123	1-CH3	2-II	4-NO2	5-SClH2CH2C(CH3)CF2
VIII.124	1-CH3	2-II	4-NO2	5-SOCH2CH2C(CH3)CF2
VIII.125	1-CH3	2-II	4-CF3	5-SClH2CH2C(CH3)CF2
VIII.126	1-CH3	2-II	4-CF3	5-SO2CH2CH2C(CH3)CF2
VIII.127	1-CH3	2-II	4-H	5-SClH2CH2C(CH3)CF2
VIII.128	1-CH3	2-II	4-H	5-SOCH2CH2C(CH3)CF2
VIII.129	1-CH3	2-II	4-H	5-SO2CH2CH2C(CH3)CF2
VIII.130	1-CH3	2-CN	4-H	5-SClH2CH2C(CH3)CF2
VIII.131	1-CH3	2-CN	4-CH3	5-SClH2CH2C(CH3)CF2
VIII.132	1-CH3	2-C6H5	4-H	5-SClH2CH2C(CH3)CF2
VIII.133	1-CH3	2-C6H5	4-H	5-SOCH2CH2C(CH3)CF2
VIII.134	1-CH3	2-C6H5	4-H	5-SO2CH2CH2C(CH3)CF2
VIII.135	1-CH3	2-COOCH2CH3	4-H	5-SClH2CH2C(CH3)CF2
VIII.136	1-CH3	2-COOCH3	4-CH3	5-SClH2CH2C(CH3)CF2
VIII.137	1-CH3	2-COOH	4-H	5-SClH2CH2C(CH3)CF2
VIII.138	1-CH3	2-CONH2	4-H	5-SClH2CH2C(CH3)CF2
VIII.139	1-CH3	2-CONH2	4-H	5-SOCH2CH2C(CH3)CF2
VIII.140	1-CH3	2-CONH2	4-H	5-SO2CH2CH2C(CH3)CF2
VIII.141	1-CH3	2-CONH2	4-CH3	5-SO2CH2CH2C(CH3)CF2
VIII.142	1-CH3	2-Cl	4-H	5-SClH2CH2C(CH3)CF2

VIII.143	1-CH3	2-F	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
VIII.144	1-CH3	2-F	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
VIII.145	1-CH3	2-Br	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
VIII.146	1-CH3	2-SO ₂ NH ₂	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
VIII.147	1-CH3	2-SO ₂ F	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
VIII.148	1-CH3	2-NO ₂	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
VIII.149	1-CH3	2-CF ₃	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
VIII.150	1-CH3	2-CF ₃	4-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
VIII.151	1-5 linked	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	4-H	-CH=CH-CH=CH-
VIII.152	1-5 linked	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	-CH=CH-CH=CH-
VIII.153	1-CH ₂ CH ₂ CH ₃	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂	4-H	5-H
VIII.154	1-CH ₂ CH ₂ CH ₃	2-SOCH ₂ CH ₂ C(CH ₃)=CF ₂	4-H	5-H
VIII.155	1-CH ₂ CH ₂ CH ₃	2-SO ₂ CH ₂ CH ₂ C(CH ₃)=CF ₂	4-H	5-H

Examples of compounds of Formula (IX) according to the invention are set out in Table IX.

TABLE IX

No.	R1	R3	R4	R5
IX.1	1-CH3	3-H	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂
IX.2	1-CH3	3-H	4-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂

IX.3	1-Cl ₁₃	3-H	4-H	5-SO ₂ CH ₁₂ CH ₂ C(Cl ₁₃)CF ₂
IX.4	1-Cl ₁₃	3-Cl	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.5	1-Cl ₁₃	3-Cl	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.6	1-Cl ₁₃	3-Cl	4-H	5-SO ₂ CH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.7	1-Cl ₁₃	3-COOC ₂ H ₅	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.8	1-Cl ₁₃	3-COOC ₂ H ₅	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.9	1-Cl ₁₃	3-COOC ₂ H ₅	4-H	5-SO ₂ CH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.10	1-Cl ₁₃	3-COOH	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.11	1-Cl ₁₃	3-COOH	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.12	1-Cl ₁₃	3-COOH	4-H	5-SO ₂ CH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.13	1-Cl ₁₃	3-CONH ₂	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.14	1-Cl ₁₃	3-CONH ₂	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.15	1-Cl ₁₃	3-CONH ₂	4-H	5-SO ₂ CH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.16	1-Cl ₁₃	3-CN	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.17	1-Cl ₁₃	3-CN	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.18	1-Cl ₁₃	3-CN	4-H	5-SO ₂ CH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.19	1-Cl ₁₃	3-SO ₂ F	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.20	1-Cl ₁₃	3-SO ₂ F	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.21	1-Cl ₁₃	3-SO ₂ F	4-H	5-SO ₂ CH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.22	1-Cl ₁₃	3-SO ₂ NH ₂	4-H	5-SCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂
IX.23	1-Cl ₁₃	3-SO ₂ NH ₂	4-H	5-SOCH ₁₂ CH ₁₂ C(Cl ₁₃)CF ₂

IX.24	1-CH3	3-SO2NH2	4-H	5-SO2CH2CH2C(CH3)CF2
IX.25	1-CH3	3-H	4-H	5-SCH2CH2C(CH3)CF2
IX.26	1-CH3	3-H	4-H	5-SOCH2CH2C(CH3)CF2
IX.27	1-CH3	3-H	4-H	5-SO2CH2C(CH3)CF2
IX.28	1-CH3	3-H	4-Cl	5-SCH2CH2C(CH3)CF2
IX.29	1-CH3	3-H	4-Cl	5-SOCH2CH2C(CH3)CF2
IX.30	1-CH3	3-H	4-Cl	5-SO2CH2CH2C(CH3)CF2
IX.31	1-CH3	3-H	4-Br	5-SCH2CH2C(CH3)CF2
IX.32	1-CH3	3-H	4-Br	5-SOCH2CH2C(CH3)CF2
IX.33	1-CH3	3-H	4-Br	5-SO2CH2CH2C(CH3)CF2
IX.34	1-CH3	3-H	4-COOC2H5	5-SCH2CH2C(CH3)CF2
IX.35	1-CH3	3-H	4-COOC2H5	5-SOCH2CH2C(CH3)CF2
IX.36	1-CH3	3-H	4-COOC2H5	5-SO2CH2CH2C(CH3)CF2
IX.37	1-CH3	3-H	4-COOCH(CH3)2	5-SCH2CH2C(CH3)CF2
IX.38	1-CH3	3-H	4-COOCH(CH3)2	5-SOCH2CH2C(CH3)CF2
IX.39	1-CH3	3-H	4-COOCH(CH3)2	5-SO2CH2CH2C(CH3)CF2
IX.40	1-CH3	3-H	4-COOH	5-SCH2CH2C(CH3)CF2
IX.41	1-CH3	3-H	4-COOH	5-SOCH2CH2C(CH3)CF2
IX.42	1-CH3	3-H	4-COOH	5-SO2CH2CH2C(CH3)CF2
IX.43	1-CH3	3-H	4-CONH2	5-SCH2CH2C(CH3)CF2
IX.44	1-CH3	3-H	4-CONH2	5-SOCH2CH2C(CH3)CF2

IX.45	1-CH3	3-H	4-CONH2	5-SO2CH12CH2C(CH3)CF2
IX.46	1-CH3	3-H	4-CN	5-SC12CH12C(CH3)CF2
IX.47	1-CH3	3-H	4-CN	5-SOCH2CH12C(CH3)CF2
IX.48	1-CH3	3-H	4-CN	5-SO2CH12CH2C(CH3)CF2
IX.49	1-CH3	3-H	4-SO2F	5-SC12CH12C(CH3)CF2
IX.50	1-CH3	3-H	4-SO2F	5-SOCH12CH12C(CH3)CF2
IX.51	1-CH3	3-H	4-SO2F	5-SO2CH12CH2C(CH3)CF2
IX.52	1-CH3	3-H	4-SO2NH2	5-SC12CH12C(CH3)CF2
IX.53	1-CH3	3-H	4-SO2NH2	5-SOCH12CH12C(CH3)CF2
IX.54	1-CH3	3-H	4-SO2NH2	5-SO2CH2CH12C(CH3)CF2
IX.55	1-CH3	3-CH3	4-H	5-SC12CH2C(CH3)CF2
IX.56	1-CH3	3-CH3	4-H	5-SOCH2CH12C(CH3)CF2
IX.57	1-CH3	3-CH3	4-H	5-SO2CH12CH2C(CH3)CF2
IX.58	1-CH3	3-CH3	4-Cl	5-SC12CH12C(CH3)CF2
IX.59	1-CH3	3-CH3	4-Cl	5-SOCH12CH12C(CH3)CF2
IX.60	1-CH3	3-CH3	4-Cl	5-SO2CH12CH2C(CH3)CF2
IX.61	1-CH3	3-CH3	4-I	5-SC12CH12C(CH3)CF2
IX.62	1-CH3	3-CH3	4-I	5-SOCH2CH12C(CH3)CF2
IX.63	1-CH3	3-CH3	4-I	5-SO2CH2CH12C(CH3)CF2
IX.64	1-CH3	3-CH3	4-COOC2H5	5-SC12CH12C(CH3)CF2
IX.65	1-CH3	3-CH3	4-COOC2H5	5-SOCH12CH12C(CH3)CF2

IX.66	1-CH3	3-CH3	4-COOC2H5	5-SO2CH2CH2C(CH3)CF2
IX.67	1-CH3	3-CH3	4-COOH	5-SCH2CH2C(CH3)CF2
IX.68	1-CH3	3-CH3	4-COOH	5-SOCH2CH2C(CH3)CF2
IX.69	1-CH3	3-CH3	4-COOH	5-SO2CH2CH2C(CH3)CF2
IX.70	1-CH3	3-CH3	4-CONH2	5-SCH2CH2C(CH3)CF2
IX.71	1-CH3	3-CH3	4-CONH2	5-SOCH2CH2C(CH3)CF2
IX.72	1-CH3	3-CH3	4-CONH2	5-SO2CH2CH2C(CH3)CF2
IX.73	1-CH3	3-CH3	4-CN	5-SCH2CH2C(CH3)CF2
IX.74	1-CH3	3-CH3	4-CN	5-SOCH2CH2C(CH3)CF2
IX.75	1-CH3	3-CH3	4-CN	5-SO2CH2CH2C(CH3)CF2
IX.76	1-CH3	3-CH3	4-SO2F	5-SCH2CH2C(CH3)CF2
IX.77	1-CH3	3-CH3	4-SO2F	5-SOCH2CH2C(CH3)CF2
IX.78	1-CH3	3-CH3	4-SO2F	5-SO2CH2CH2C(CH3)CF2
IX.79	1-CH3	3-CH3	4-SO2NH2	5-SCH2CH2C(CH3)CF2
IX.80	1-CH3	3-CH3	4-SO2NH2	5-SOCH2CH2C(CH3)CF2
IX.81	1-CH3	3-CH3	4-SO2NH2	5-SO2CH2CH2C(CH3)CF2
IX.82	1-CH3	3-CH3	4-NO2	5-SCH2CH2C(CH3)CF2
IX.83	1-CH3	3-CH3	4-NO2	5-SOCH2CH2C(CH3)CF2
IX.84	1-CH3	3-CH3	4-NO2	5-SO2CH2CH2C(CH3)CF2
IX.85	1-CH3	3-CF3	4-H	5-SCH2CH2C(CH3)CF2
IX.86	1-CH3	3-CF3	4-H	5-SOCH2CH2C(CH3)CF2

IX.87	1-ClH3	3-ClF3	4-II	3-SO2CH2CH2C(ClH3)CF2
IX.88	1-ClH3	3-C6H5	4-II	5-SClH2CH2C(ClH3)CF2
IX.89	1-ClH3	3-C6H5	4-II	5-SOClH2CH2C(ClH3)CF2
IX.90	1-ClH3	3-C6H5	4-II	5-SO2CH2CH2C(ClH3)CF2
IX.91	1-ClH3	3-C6H5	4-CN	5-SClH2CH2C(ClH3)CF2
IX.92	1-ClH3	3-C6H5	4-CN	5-SOClH2CH2C(ClH3)CF2
IX.93	1-ClH3	3-C6H5	4-CN	5-SO2CH2CH2C(ClH3)CF2
IX.94	1-ClH3	3-SClH2CH2C(ClH3)CF2	4-CN	5-II
IX.95	1-ClH3	3-SOClH2CH2C(ClH3)CF2	4-CN	5-II
IX.96	1-ClH3	3-SO2CH2CH2C(ClH3)CF2	4-CN	5-II
IX.97	1-ClH3	3-SClH2CH2C(ClH3)CF2	4-II	5-Cl
IX.98	1-ClH3	3-SOClH2CH2C(ClH3)CF2	4-II	5-Cl
IX.99	1-ClH3	3-SO2CH2CH2C(ClH3)CF2	4-II	5-Cl
IX.100	1-ClH3	3-SClH2CH2C(ClH3)CF2	4-II	5-CN
IX.101	1-ClH3	3-SOClH2CH2C(ClH3)CF2	4-II	5-CN
IX.102	1-ClH3	3-SO2CH2CH2C(ClH3)CF2	4-II	5-CN
IX.103	1-ClH3	3-SClH2CH2C(ClH3)CF2	4-II	5-COOC2H5
IX.104	1-ClH3	3-SOClH2CH2C(ClH3)CF2	4-II	5-COOC2H5
IX.105	1-ClH3	3-SO2CH2CH2C(ClH3)CF2	4-II	5-COOC2H5
IX.106	1-ClH3	3-SClH2CH2C(ClH3)CF2	4-II	5-CF3
IX.107	1-ClH3	3-SOClH2CH2C(ClH3)CF2	4-II	5-CF3

IX.108	1-C113	3-SO2CH12CH12C(CH13)CF2	4-II	5-Cl3
IX.109	1-CH2COOH	3-SC112CH12C(CH13)CF2	4-II	5-CH3
IX.110	1-CH2COOH	3-SOCH12CH12C(CH13)CF2	4-II	5-CH3
IX.111	1-CH2COOH	3-SO2CH12CH12C(CH13)CF2	4-II	5-CH3
IX.112	1-CH2COOC2H5	3-SCH12CH12C(CH13)CF2	4-II	5-C6H5
IX.113	1-CH2COOC2H5	3-SOCH12CH12C(CH13)CF2	4-II	5-C6H5
IX.114	1-CH2COOC2H5	3-SO2CH12CH12C(CH13)CF2	4-II	5-C6H5
IX.115	1-CH2CN	3-SC112CH12C(CH13)CF2	4-II	5-(2-Thienyl)
IX.116	1-CH2CN	3-SOCH12CH12C(CH13)CF2	4-II	5-(2-Thienyl)
IX.117	1-CH2CN	3-SO2CH12CH12C=CF2	4-II	5-(2-Thienyl)
IX.118	1-C6H5	3-II	4-H	5-SC112CH12C(CH13)CF2
IX.119	1-C6H5	3-II	4-II	5-SOCH12CH12C(CH13)CF2
IX.120	1-C6H5	3-II	4-H	5-SO2CH12CH12C(CH13)CF2
IX.121	1-C6H5	3-II	4-CN	5-SC112CH12C(CH13)CF2
IX.122	1-C6H5	3-II	4-CN	5-SOCH12CH12C(CH13)CF2
IX.123	1-C6H5	3-II	4-CN	5-SO2CH12CH12C(CH13)CF2
IX.124	1-C6H5	3-II	4-COOC2H5	5-SC112CH12C(CH13)CF2
IX.125	1-C6H5	3-II	4-COOC2H5	5-SOCH12CH12C(CH13)CF2
IX.126	1-C6H5	3-II	4-COOC2H5	5-SO2CH12CH12C(CH13)CF2
IX.127	1-C6H5	3-II	4-COOH	5-SC112CH12C(CH13)CF2
IX.128	1-C6H5	3-II	4-COOH	5-SOCH12CH12C(CH13)CF2

IX.129	1-C6H5	3-H	4-COOH	5-SO2CH2CH2C(CH3)CF2
IX.130	1-C6H5	3-H	4-Cl	5-SCH2CH2C(CH3)CF2
IX.131	1-C6H5	3-H	4-Cl	5-SOCH2CH2C(CH3)CF2
IX.132	1-C6H5	3-H	4-Cl	5-SO2CH2CH2C(CH3)CF2
IX.133	1-C6H5	3-H	4-SO2F	5-SCH2CH2C(CH3)CF2
IX.134	1-C6H5	3-H	4-SO2F	5-SOCH2CH2C(CH3)CF2
IX.135	1-C6H5	3-H	4-SO2F	5-SO2CH2CH2C(CH3)CF2
IX.136	1-C6H5	3-CH3	4-H	5-SCH2CH2C(CH3)CF2
IX.137	1-C6H5	3-CH3	4-H	5-SOCH2CH2C(CH3)CF2
IX.138	1-C6H5	3-CH3	4-H	5-SO2CH2CH2C(CH3)CF2
IX.139	1-C6H5	3-CH3	4-CN	5-SCH2CH2C(CH3)CF2
IX.140	1-C6H5	3-CH3	4-CN	5-SOCH2CH2C(CH3)CF2
IX.141	1-C6H5	3-CH3	4-CN	5-SO2CH2CH2C(CH3)CF2
IX.142	1-C6H5	3-CH3	4-COOC2H5	5-SCH2CH2C(CH3)CF2
IX.143	1-C6H5	3-CH3	4-COOC2H5	5-SOCH2CH2C(CH3)CF2
IX.144	1-C6H5	3-CH3	4-COOC2H5	5-SO2CH2CH2C(CH3)CF2
IX.145	1-C6H5	3-CH3	4-COOH	5-SCH2CH2C(CH3)CF2
IX.146	1-C6H5	3-CH3	4-COOH	5-SOCH2CH2C(CH3)CF2
IX.147	1-C6H5	3-CH3	4-COOH	5-SO2CH2CH2C(CH3)CF2
IX.148	1-C6H5	3-CH3	4-Cl	5-SCH2CH2C(CH3)CF2
IX.149	1-C6H5	3-CH3	4-Cl	5-SOCH2CH2C(CH3)CF2

IX.150	1-C6H5	3-CH3	4-Cl	5-SO2CH2CH2C(CH3)CF2
IX.151	1-C6H5	3-CH3	4-SO2F	5-SCH2CH2C(CH3)CF2
IX.152	1-C6H5	3-CH3	4-SO2F	5-SOCH2CH2C(CH3)CF2
IX.153	1-C6H5	3-CH3	4-SO2F	5-SO2CH2CH2C(CH3)CF2
IX.154	1-C6H5	3-Cl	4-H	5-SCH2CH2C(CH3)CF2
IX.155	1-C6H5	3-Cl	4-H	5-SOCH2CH2C(CH3)CF2
IX.156	1-C6H5	3-Cl	4-H	5-SO2CH2CH2C(CH3)CF2
IX.157	1-C6H5	3-COOC2H5	4-H	5-SCH2CH2C(CH3)CF2
IX.158	1-C6H5	3-COOC2H5	4-H	5-SOCH2CH2C(CH3)CF2
IX.159	1-C6H5	3-COOC2H5	4-H	5-SO2CH2CH2C(CH3)CF2
IX.160	1-C6H5	3-COOH	4-H	5-SCH2CH2C(CH3)CF2
IX.161	1-C6H5	3-COOH	4-H	5-SOCH2CH2C(CH3)CF2
IX.162	1-C6H5	3-COOH	4-H	5-SO2CH2CH2C(CH3)CF2
IX.163	1-C6H5	3-CONH2	4-H	5-SCH2CH2C(CH3)CF2
IX.164	1-C6H5	3-CONH2	4-H	5-SOCH2CH2C(CH3)CF2
IX.165	1-C6H5	3-CONH2	4-H	5-SO2CH2CH2C(CH3)CF2
IX.166	1-C6H5	3-CN	4-H	5-SCH2CH2C(CH3)CF2
IX.167	1-C6H5	3-CN	4-H	5-SOCH2CH2C(CH3)CF2
IX.168	1-C6H5	3-CN	4-H	5-SO2CH2CH2C(CH3)CF2
IX.169	1-C6H5	3-SO2F	4-H	5-SCH2CH2C(CH3)CF2
IX.170	1-C6H5	3-SO2F	4-H	5-SOCH2CH2C(CH3)CF2

IX.171	1-C6H5	3-SO2F	4-II	5-SO2CH12CH2C(CH3)CF2
IX.172	1-C6H5	3-SO2NH2	4-II	5-SC12CH2C(CH3)CF2
IX.173	1-C6H5	3-SO2NH2	4-II	5-SOCH12CH2C(CH3)CF2
IX.174	1-C6H5	3-SO2NH2	4-II	5-SO2CH12CH2C(CH3)CF2
IX.175	1-CH3	3-II	4-SC12CH2C(CH3)CF2	5-CN
IX.176	1-CH3	3-II	4-SOCH12CH2C(CH3)CF2	5-CN
IX.177	1-CH3	3-II	4-SO2CH12CH2C=CF2	5-CN
IX.178	1-CH3	3-II	4-SC12CH2C(CH3)CF2	5-COOC2H5
IX.179	1-CH3	3-II	4-SOCH12CH2C(CH3)CF2	5-COOC2H5
IX.180	1-CH3	3-II	4-SO2CH12CH2C=CF2	5-COOC2H5
IX.181	1-CH3	3-II	4-SC12CH2C(CH3)CF2	5-CF3
IX.182	1-CH3	3-II	4-SOCH12CH2C(CH3)CF2	5-CF3
IX.183	1-CH3	3-II	4-SO2CH12CH2C(CH3)CF2	5-CF3
IX.184	1-CH3	3-CN	4-SC12CH2C(CH3)CF2	5-II
IX.185	1-CH3	3-CN	4-SOCH12CH2C(CH3)CF2	5-II
IX.186	1-CH3	3-CN	4-SO2CH12CH2C(CH3)CF2	5-II
IX.187	1-CH3	3-COOC2H5	4-SC12CH2C(CH3)CF2	5-II
IX.188	1-CH3	3-COOC2H5	4-SOCH12CH2C(CH3)CF2	5-II
IX.189	1-CH3	3-COOC2H5	4-SO2CH12CH2C(CH3)CF2	5-II
IX.190	1-CH3	3-CF3	4-SC12CH2C(CH3)CF2	5-II
IX.191	1-CH3	3-CF3	4-SOCH12CH2C(CH3)CF2	5-II

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4-SO₂ClI₂ClI₂C(ClI₃)CF₂ 5-II

3-CF₃

IX.192 1-CF₃

Examples of compounds of Formula (X) according to the invention are set out in Table X.

TABLE X

No.	R3	R5
X.1	3-c-C3H5	5-SCH2CH2C(CH3)CF2
X.2	3-C°CH	5-SCH2CH2C(CH3)CF2
X.3	3-C6H5	5-SCH2CH2C(CH3)CF2
X.4	3-C6H5	5-SOCH2CH2C(CH3)CF2
X.5	3-C6H5	5-SO2CH2CH2C(CH3)CF2
X.6	3-CF2H	5-SCH2CH2C(CH3)CF2
X.7	3-CF3	5-SCH2CH2C(CH3)CF2
X.8	3-CH(CH3)2	5-SCH2CH2C(CH3)CF2
X.9	3-CH=CH2	5-SCH2CH2C(CH3)CF2
X.10	3-CH2Br	5-SCH2CH2C(CH3)CF2
X.11	3-CH2C6H5	5-SCH2CH2C(CH3)CF2
X.12	3-CH2C6H5	5-SOCH2CH2C(CH3)CF2
X.13	3-CH2CF3	5-SCH2CH2C(CH3)CF2
X.14	3-CH2CF3	5-SOCH2CH2C(CH3)CF2
X.15	3-CH2CF3	5-SO2CH2CH2C(CH3)CF2
X.16	3-CH2CH=CH2	5-SCH2CH2C(CH3)CF2
X.17	3-CH2CH2F	5-SCH2CH2C(CH3)CF2
X.18	3-CH2CH3	5-SCH2CH2C(CH3)CF2
X.19	3-CH2CN	5-SCH2CH2C(CH3)CF2
X.20	3-CH2CN	5-SOCH2CH2C(CH3)CF2
X.21	3-CH2CONH2	5-SCH2CH2C(CH3)CF2
X.22	3-CH2COOCH2CH3	5-SCH2CH2C(CH3)CF2
X.23	3-CH2N(CH3)2	5-SCH2CH2C(CH3)CF2
X.24	3-CH2NHCOCH3	5-SCH2CH2C(CH3)CF2
X.25	3-CH2NHCOOCH3	5-SCH2CH2C(CH3)CF2
X.26	3-CH2OCH3	5-SCH2CH2C(CH3)CF2

X.27	3-CH ₂ OCH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.28	3-CH ₂ OH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.29	3-CH ₂ OH	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.30	3-CH ₂ SO ₂ C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.31	3-CH ₂ SO ₂ C ₆ H ₅	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.32	3-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.33	3-CH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.34	3-CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.35	3-COC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.36	3-COCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.37	3-CON(CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.38	3-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.39	3-CONHCH ₂ C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.40	3-CONHCH ₂ C ₆ H ₅	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.41	3-CONHCH ₂ CH ₂ CHCF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.42	3-CONHCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.43	3-CONHSO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.44	3-COOC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.45	3-COOC ₆ H ₅	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.46	3-COOC ₆ H ₅	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.47	3-COOCH ₂ CH ₂ CHCF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.48	3-COOCH ₂ CH ₂ CHCF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.49	3-COOCH ₂ CH ₂ CHCF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.50	3-COOCH ₂ CH ₂ F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.51	3-COOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.52	3-COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.53	3-COSCH ₂ CH ₂ CHCF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.54	3-CSNH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.55	3-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.56	3-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.57	3-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.58	3-N(SO ₂ CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

X.59	3-NHCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.60	3-NHCHO	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.61	3-NHCOOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.62	3-NHCOCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.63	3-NHCOCF ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.64	3-NHCOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.65	3-NHCOCH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.66	3-NHCSCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.67	3-NHCSNHCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.68	3-NHSO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.69	3-OCF ₂ CF ₂ H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.70	3-OCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.71	3-OCF ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.72	3-OCH ₂ C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.73	3-OCH ₂ C ₆ H ₅	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.74	3-OCH ₂ CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.75	3-OCH ₂ CF ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.76	3-OCH ₂ CF ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.77	3-OCH ₂ CH=CCl ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.78	3-OCH ₂ CH ₂ CHCF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.79	3-OCH ₂ CH ₂ CHCF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.80	3-OCH ₂ CH ₂ CHCF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.81	3-OCH ₂ CH ₂ F	5-SCH ₂ CH ₂ CHCF ₂
X.82	3-OCH ₂ COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.83	3-OCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.84	3-OCOC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.85	3-OCOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.86	3-OC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.87	3-OC ₆ H ₅	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.88	3-OC ₆ H ₅	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.89	3-OSO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.90	3-OSO ₂ CH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂

X.91	3-SCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.92	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
X.93	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
X.94	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
X.95	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₂ H
X.96	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
X.97	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
X.98	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
X.99	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃
X.100	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ F
X.101	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ Cl
X.102	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN
X.103	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
X.104	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OH
X.105	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
X.106	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
X.107	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
X.108	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
X.109	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CON(CH ₃) ₂
X.110	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ CHCF ₂
X.111	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃ C ₂ F
X.112	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
X.113	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-F
X.114	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
X.115	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-N(SO ₂ CH ₃) ₂
X.116	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCHO
X.117	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃
X.118	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOOCH ₃
X.119	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHSO ₂ CH ₃
X.120	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂
X.121	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
X.122	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₂ H

X.123	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃
X.124	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
X.125	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
X.126	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
X.127	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOCH ₃
X.128	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃
X.129	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.130	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.131	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.132	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃
X.133	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CF ₃
X.134	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.135	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.136	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₃
X.137	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₃
X.138	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ N(CH ₃) ₂
X.139	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCF ₃
X.140	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.141	3-SCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.142	3-SO ₂ CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.143	3-SO ₂ CF ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.144	3-SO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.145	3-SO ₂ N(CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.146	3-SO ₂ NH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.147	3-SO ₂ NHCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.148	3-SO ₂ NHCH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.149	3-SOCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.150	3-SOCF ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
X.151	3-SOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.152	3-SOCH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.153	3-(4-CF ₃ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.154	3-(4-CF ₃ -C ₆ H ₄)	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂

X.155	3-(4-CH ₃ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.156	3-(4-CN-C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.157	3-(4-CONH ₂ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.158	3-(4-CONH ₂ -C ₆ H ₄)	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
X.159	3-(4-NO ₂ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
X.160	3-(4-OCH ₃ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

Examples of compounds of Formula (XI) according to the invention are set out in Table XI.

TABLE XI

No.	R ₃	R ₅
XI.1	3-Br	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.2	3-c-C ₅ H ₉	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.3	3-c-C ₅ H ₉	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.4	3-C ^o CH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.5	3-C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.6	3-C ₆ H ₅	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.7	3-C ₆ H ₅	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.8	3-CF ₂ H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.9	3-CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.10	3-CH=CH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.11	3-CH=CHCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.12	3-CH=CHCN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.13	3-CH=CHNO ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.14	3-CH=NOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.15	3-CH ₂ (3-CF ₃ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.16	3-CH ₂ (3-CF ₃ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.17	3-CH ₂ C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.18	3-CH ₂ C ₆ H ₅	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.19	3-CH ₂ C ₆ H ₅	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂

XI.20	3-CH ₂ CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.21	3-CH ₂ CF ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.22	3-CH ₂ CH=CH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.23	3-CH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.24	3-CH ₂ CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.25	3-CH ₂ Cl	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.26	3-CH ₂ CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.27	3-CH ₂ CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.28	3-CH ₂ N(CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.29	3-CH ₂ NHCOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.30	3-CH ₂ OCH ₂ CH ₂ CH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.31	3-CH ₂ OCH ₂ CH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.32	3-CH ₂ OCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.33	3-CH ₂ OCH ₂ CH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.34	3-CH ₂ OCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.35	3-CH ₂ OCH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.36	3-CH ₂ OCH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.37	3-CH ₂ OH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.38	3-CH ₂ SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.39	3-CH ₂ SO ₂ C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.40	3-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.41	3-CH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.42	3-CH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.43	3-Cl	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.44	3-Cl	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.45	3-CN	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.46	3-COC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.47	3-COCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.48	3-CON(CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.49	3-CON(CH ₃)C ₂ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.50	3-CONH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.51	3-CONHCH ₂ C ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

XI.52	3-CONHCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.53	3-CONHCH ₂ CH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.54	3-CONHCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.55	3-CONHCH ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.56	3-CONHCH ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.57	3-CONHSO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.58	3-COOC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.59	3-COOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.60	3-COOCH ₂ CH ₂ F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.61	3-COOCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.62	3-COOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.63	3-COOH	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.64	3-COSCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.65	3-CSNH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.66	3-F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.67	3-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.68	3-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.69	3-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.70	3-N(SO ₂ CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.71	3-NHCHO	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.72	3-NHCOC ₂ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.73	3-NHCOCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.74	3-NHCOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.75	3-NHCSCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.76	3-NHCSNHCH ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.77	3-NHSO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.78	3-NO ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.79	3-OC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.80	3-OCF ₂ CF ₂ H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.81	3-OCF ₂ H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.82	3-OCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.83	3-OCH ₂ CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

XI.84	3-OCH ₂ CF ₃	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.85	3-OCH ₂ CF ₃	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.86	3-OCH ₂ CH=CCl ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.87	3-OCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.88	3-OCOC ₂ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.89	3-OCOC ₆ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.90	3-OCOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.91	3-OSO ₂ CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.92	3-SCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.93	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
XI.94	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XI.95	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃
XI.96	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH=CH ₂
XI.97	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN
XI.98	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CONH ₂
XI.99	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ NHCOCH ₃
XI.100	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
XI.101	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XI.102	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl
XI.103	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN
XI.104	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
XI.105	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCHO
XI.106	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
XI.107	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XI.108	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃
XI.109	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.110	3-SCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.111	3-SO ₂ C ₂ H ₅	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.112	3-SO ₂ CF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.113	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XI.114	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.115	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂

XI.116	3-SO ₂ F	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.117	3-SO ₂ N(CH ₃) ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.118	3-SO ₂ NH ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.119	3-SO ₂ NHCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.120	3-SOCF ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.121	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN
XI.122	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XI.123	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.124	3-SOCH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.125	3-(2-Pyrazinyl)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.126	3-(3-F-C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.127	3-(3-NO ₂ -C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.128	3-(3-NO ₂ -C ₆ H ₄)	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.129	3-(3-NO ₂ -C ₆ H ₄)	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XI.130	3-(4-F-C ₆ H ₄)	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XI.131	3-(4-F-C ₆ H ₄)	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XI.132	3-(4-F-C ₆ H ₄)	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂

Examples of compounds of Formula (XII) according to the invention are set out in Table XII.

TABLE XII

No.	R ₂	R ₅
XII.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-c-C ₃ H ₅
XII.2	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ^o CH
XII.3	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
XII.4	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
XII.5	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
XII.6	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₂ H
XII.7	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
XII.8	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH(CH ₃) ₂

XII.9	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH(CH ₃) ₂
XII.10	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH=CH ₂
XII.11	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ (2,6-di F -C ₆ H ₃)
XII.12	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ (4-NO ₂ -C ₆ H ₄)
XII.13	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ (4-NO ₂ -C ₆ H ₄)
XII.14	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ (4-OCH ₃ -C ₆ H ₄)
XII.15	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ (4-OCH ₃ -C ₆ H ₄)
XII.16	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ Br
XII.17	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XII.18	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XII.19	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XII.20	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃
XII.21	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃
XII.22	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃
XII.23	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH(CH ₃) ₂
XII.24	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH=CH ₂
XII.25	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₂ CH ₃
XII.26	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₂ CH ₃
XII.27	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₂ CH ₃
XII.28	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₃
XII.29	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₃
XII.30	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₃
XII.31	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₃
XII.32	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₃
XII.33	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₃
XII.34	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ F
XII.35	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₃
XII.36	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN
XII.37	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN
XII.38	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CONH ₂
XII.39	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ COOCH ₂ CH ₃
XII.40	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ N(CH ₃) ₂

XII.41	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ NHCOCH ₃
XII.42	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ NHCOOCH ₃
XII.43	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
XII.44	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
XII.45	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OH
XII.46	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OH
XII.47	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ SO ₂ C ₆ H ₅
XII.48	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ SO ₂ C ₆ H ₅
XII.49	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XII.50	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XII.51	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XII.52	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COC ₆ H ₅
XII.53	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COCH ₃
XII.54	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CON(CH ₃) ₂
XII.55	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
XII.56	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ C ₆ H ₅
XII.57	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ C ₆ H ₅
XII.58	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ CH ₂ C(CH ₃)CF ₂
XII.59	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₃
XII.60	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHSO ₂ CH ₃
XII.61	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOC ₆ H ₅
XII.62	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOC ₆ H ₅
XII.63	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-COOC ₆ H ₅
XII.64	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XII.65	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XII.66	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XII.67	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ F
XII.68	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃
XII.69	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
XII.70	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOH
XII.71	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COSCH ₂ CH ₂ C(CH ₃)CF ₂
XII.72	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CSNH ₂

XII.73	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
XII.74	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
XII.75	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H
XII.76	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-N(SO ₂ CH ₃) ₂
XII.77	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCH ₂ CH ₃
XII.78	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCHO
XII.79	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOOCH ₃
XII.80	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃
XII.81	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃
XII.82	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCH ₃
XII.83	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCH ₃
XII.84	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCSCH ₂ CH ₃
XII.85	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCSNHCH ₂ CH ₃
XII.86	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHSO ₂ CH ₃
XII.87	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₂ CF ₂ H
XII.88	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃
XII.89	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃
XII.90	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ C ₆ H ₅
XII.91	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ C ₆ H ₅
XII.92	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XII.93	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XII.94	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XII.95	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH=CCl ₂
XII.96	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂
XII.97	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂
XII.98	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂
XII.99	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ F
XII.100	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ COOH
XII.101	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃
XII.102	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOC ₆ H ₅
XII.103	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOCH ₃
XII.104	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅

XII.105	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
XII.106	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
XII.107	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃
XII.108	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃
XII.109	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCF ₃
XII.110	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XII.111	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃
XII.112	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CF ₃
XII.113	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CF ₃
XII.114	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XII.115	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XII.116	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₃
XII.117	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ N(CH ₃) ₂
XII.118	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NH ₂
XII.119	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NHCH ₃
XII.120	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NHCH ₃
XII.121	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCF ₃
XII.122	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCF ₃
XII.123	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XII.124	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XII.125	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XII.126	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₃
XII.127	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₃
XII.128	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(2-CH ₃ -C ₆ H ₄)
XII.129	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-(2-CH ₃ -C ₆ H ₄)
XII.130	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(2-CH ₃ -C ₆ H ₄)
XII.131	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(2-Furyl)
XII.132	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(2-OCH ₃ -C ₆ H ₄)
XII.133	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(2-Thiophenyl)
XII.134	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(3-Furyl)
XII.135	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CF ₃ -C ₆ H ₄)
XII.136	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CF ₃ -C ₆ H ₄)

XII.137	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CH ₃ -C ₆ H ₄)
XII.138	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CN-C ₆ H ₄)
XII.139	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CONH ₂ -C ₆ H ₄)
XII.140	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CONH ₂ -C ₆ H ₄)
XII.141	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-NO ₂ -C ₆ H ₄)
XII.142	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-NO ₂ -C ₆ H ₄)
XII.143	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-NO ₂ -C ₆ H ₄)
XII.144	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OCH ₃ -C ₆ H ₄)
XII.145	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OCH ₃ -C ₆ H ₄)
XII.146	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OCH ₃ -C ₆ H ₄)
XII.147	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OH-C ₆ H ₄)
XII.148	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-Pyridinyl)

Examples of compounds of Formula (XIII) according to the invention are set out in Table XIII.

TABLE XIII

No.	R ₂	R ₅
XIII.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Br
XIII.2	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-Br
XIII.3	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C(CH ₃) ₃
XIII.4	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-C(CH ₃) ₃
XIII.5	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C(O)C ₆ H ₅
XIII.6	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-c-C ₃ H ₅
XIII.7	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-c-C ₃ H ₅
XIII.8	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ^o CH
XIII.9	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
XIII.10	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
XIII.11	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅
XIII.12	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₂ H

XIII.13	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₂ H
XIII.14	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
XIII.15	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃
XIII.16	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH(CH ₃) ₂
XIII.17	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH(CH ₃) ₂
XIII.18	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH=CH ₂
XIII.19	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ Br
XIII.20	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XIII.21	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XIII.22	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅
XIII.23	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃
XIII.24	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ F
XIII.25	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ F
XIII.26	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ F
XIII.27	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₃
XIII.28	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₃
XIII.29	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₃
XIII.30	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CHCH ₂
XIII.31	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN
XIII.32	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CONH ₂
XIII.33	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ COOCH ₂ CH ₃
XIII.34	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ N(CH ₃) ₂
XIII.35	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
XIII.36	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
XIII.37	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃
XIII.38	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OH
XIII.39	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ SO ₂ C ₆ H ₅
XIII.40	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XIII.41	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XIII.42	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃
XIII.43	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COCH ₃
XIII.44	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CON(CH ₃) ₂

XIII.45	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂
XIII.46	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ C ₆ H ₅
XIII.47	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.48	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.49	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.50	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₃
XIII.51	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHSO ₂ CH ₃
XIII.52	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHSO ₂ CH ₃
XIII.53	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOC ₆ H ₅
XIII.54	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOC ₆ H ₅
XIII.55	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.56	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.57	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.58	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ F
XIII.59	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃
XIII.60	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOH
XIII.61	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COSCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.62	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CSNH ₂
XIII.63	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
XIII.64	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H
XIII.65	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H
XIII.66	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-N(CH ₃) ₂
XIII.67	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-N(SO ₂ CH ₃) ₂
XIII.68	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-N(SO ₂ CH ₃) ₂
XIII.69	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NH ₂
XIII.70	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCH ₃
XIII.71	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCH ₃
XIII.72	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCH ₃
XIII.73	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCHO
XIII.74	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCHO
XIII.75	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃
XIII.76	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃

XIII.77	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCH ₃
XIII.78	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOOCH ₃
XIII.79	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOOCH ₃
XIII.80	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCSCH ₂ CH ₃
XIII.81	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCSNHCH ₂ CH ₃
XIII.82	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHSO ₂ CH ₃
XIII.83	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-NHSO ₂ CH ₃
XIII.84	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
XIII.85	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
XIII.86	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅
XIII.87	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₂ CF ₂ H
XIII.88	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃
XIII.89	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃
XIII.90	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃
XIII.91	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ C ₆ H ₅
XIII.92	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XIII.93	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XIII.94	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃
XIII.95	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH=CCl ₂
XIII.96	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.97	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.98	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.99	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ F
XIII.100	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ COOCH ₃
XIII.101	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃
XIII.102	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃
XIII.103	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃
XIII.104	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOC ₆ H ₅
XIII.105	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOCH ₃
XIII.106	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃
XIII.107	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃
XIII.108	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃

XIII.109	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCF ₃
XIII.110	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ (3-CF ₃ C ₆ H ₄)
XIII.111	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ (3-CF ₃ C ₆ H ₄)
XIII.112	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ (3-CF ₃ C ₆ H ₄)
XIII.113	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ (4-CF ₃ -C ⁴ H ₄)
XIII.114	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ (c-C ₃ H ₅)
XIII.115	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ C ^o CH
XIII.116	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH=CH ₂
XIII.117	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.118	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.119	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃
XIII.120	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃
XIII.121	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃
XIII.122	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SH
XIII.123	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XIII.124	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XIII.125	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₃
XIII.126	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ CH ₃
XIII.127	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ N(CH ₃) ₂
XIII.128	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NH ₂
XIII.129	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NHCH ₃
XIII.130	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCF ₃
XIII.131	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCF ₃
XIII.132	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.133	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.134	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XIII.135	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₃
XIII.136	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CF ₃ -C ₆ H ₄)
XIII.137	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CF ₃ -C ₆ H ₄)
XIII.138	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CH ₃ -C ₆ H ₄)
XIII.139	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CH ₃ -C ₆ H ₄)
XIII.140	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CN-C ₆ H ₄)

XIII.141	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CN-C ₆ H ₄)
XIII.142	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-CONH ₂ -C ₆ H ₄)
XIII.143	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-H ₂ NSO ₂ -C ₆ H ₄)
XIII.144	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-NO ₂ -C ₆ H ₄)
XIII.145	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OCH ₃ -C ₆ H ₄)
XIII.146	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OCH ₃ -C ₆ H ₄)
XIII.147	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-OCH ₃ -C ₆ H ₄)

Examples of compounds of Formula (XIV) according to the invention are set out in Table XIV.

TABLE XIV

No.	R1	R5
XIV.1	1-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂

Examples of compounds of Formula (XV) according to the invention are set out in Table XV.

TABLE XV

No.	R1	R2	R3	R4
XV.1	1-SCH ₂ CH ₂ C(CH ₃)CF ₂	2-H	3-H	4-NO ₂

Examples of compounds of Formula (XVI) according to the invention are set out in Table XVI.

TABLE XVI

No.	R2	R3	R4	R5	R6
XVI.1	2-Cl	3-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H
XVI.2	2-F	3-F	4-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-F	6-F
XVI.3	2-F	3-F	4-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-F	6-F
XVI.4	2-F	3-F	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-F	6-F
XVI.5	2-H	3-H	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H
XVI.6	2-H	3-H	4-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H
XVI.7	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-CF ₃	4-H	5-H	6-H
XVI.8	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-CN	4-H	5-H	6-H
XVI.9	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-CONH ₂	4-H	5-H	6-H
XVI.10	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-COOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-H
XVI.11	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CF ₃	6-H
XVI.12	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CF ₃	6-H
XVI.13	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-Cl	6-H
XVI.14	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-Cl	6-H
XVI.15	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CN	6-H

XVI.16	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CN	6-H
XVI.17	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-CONH ₂	6-H
XVI.18	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-COOH	6-H
XVI.19	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H	6-H
XVI.20	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H	6-H
XVI.21	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-NO ₂	6-H
XVI.22	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-SCl ₂ CH ₂ C(CH ₃)CF ₂	6-H
XVI.23	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-H	4-H	5-H	6-F
XVI.24	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	3-NO ₂	4-H	5-H	6-H

Examples of compounds of Formula (XVII) according to the invention are set out in Table XVII.

TABLE XVII

No.	R3	R4	R5	R6
XVII.1	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-CH ₃
XVII.2	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-Cl
XVII.3	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-OCH ₃
XVII.4	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-C ₆ H ₅
XVII.5	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-C ₆ H ₅
XVII.6	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	4-H	5-H	6-C ₆ H ₅
XVII.7	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	-CH=CH-CH=CH-		6-H

Examples of compounds of Formula (XVIII) according to the invention are set out in Table XVIII.

TABLE XVIII

No.	R2	R3	R5	R6
XVIII.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=CH-CH=CH-	
XVIII.2	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=CH-CH=CH-	
XVIII.3	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=CH-CH=CH-	
XVIII.4	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=C(Cl)CH=CH-	
XVIII.5	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=C(Cl)CH=CH-	
XVIII.6	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	-CH=C(Cl)CH=CH-	
XVIII.7	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	5-H	6-H
XVIII.8	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	5-H	6-H
XVIII.9	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	5-H	6-H
XVIII.10	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-Cl	5-H	6-H
XVIII.11	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-Cl	5-H	6-H
XVIII.12	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-Cl	5-H	6-H

XVIII.13	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H
XVIII.14	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	5-H	6-Cl
XVIII.15	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	3-H	5-H	6-Cl
XVIII.16	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	3-H	5-H	6-Cl

Examples of compounds of Formula (XIX) according to the invention are set out in Table XIX.

TABLE XIX

No.	R ₄	R ₅	R ₆
XIX.1	4-SCH ₂ CH ₂ C(CH ₃)CF ₂	-CH=CH-CH=CH-	

Examples of compounds of Formula (XX) according to the invention are set out in Table XX.

TABLE XX

No.	R ₃	R ₅	R ₆
XX.1	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Br	6-H
XX.2	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-c-C ₃ H ₅	6-H
XX.3	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-c-C ₃ H ₅	6-H
XX.4	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅	6-CH ₃
XX.5	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅	6-CH ₃
XX.6	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅	6-CH ₃
XX.7	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅	6-CN
XX.8	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅	6-H
XX.9	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-C ₆ H ₅	6-H
XX.10	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-F-C ₆ H ₄)	6-H
XX.11	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-(4-F-C ₆ H ₄)	6-H
XX.12	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₂ H	6-CH ₃
XX.13	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃	6-H

XX.14	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CF ₃	6-OC ₆ H ₅
XX.15	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH(CH ₃) ₂	6-H
XX.16	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH=CH ₂	6-H
XX.17	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH=CHCN	6-H
XX.18	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH=CHNO ₂	6-H
XX.19	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH=NOCH ₃	6-CH ₃
XX.20	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C°CH	6-H
XX.21	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅	6-H
XX.22	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ C ₆ H ₅	6-H
XX.23	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CF ₃	6-H
XX.24	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH=CH ₂	6-H
XX.25	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₃	6-H
XX.26	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₂ CH ₃	6-H
XX.27	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₃	6-H
XX.28	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ CH ₃	6-H
XX.29	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₂ F	6-H
XX.30	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CH ₃	6-H
XX.31	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CN	6-CH ₃
XX.32	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ CONH ₂	6-H
XX.33	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ N(CH ₃) ₂	6-CH ₃
XX.34	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ NHCOCH ₃	6-H
XX.35	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₂ CH ₃	6-H
XX.36	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₂ CH ₃	6-H
XX.37	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OCH ₃	6-CH ₃
XX.38	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ OH	6-H
XX.39	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₂ SO ₂ C ₆ H ₅	6-H
XX.40	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CF ₂ H
XX.41	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CH=CH ₂
XX.42	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CH ₂ CH ₂ F
XX.43	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CH ₂ CN
XX.44	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CH ₂ N(CH ₃) ₂
XX.45	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CH ₂ OH

XX.46	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CH ₃
XX.47	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CONH ₂
XX.48	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CONHCH ₃
XX.49	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-CONHSO ₂ CH ₃
XX.50	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-COOCH ₂ CH ₃
XX.51	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-COOCH ₃
XX.52	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-H
XX.53	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-H
XX.54	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-H
XX.55	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-NHCHO
XX.56	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-NHCOCH ₃
XX.57	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-NHCONH ₂
XX.58	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-OCF ₂ H
XX.59	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-OCH ₂ CF ₃
XX.60	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-OCH ₂ CH ₂ F
XX.61	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-OCOCH ₃
XX.62	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-OSO ₂ CH ₃
XX.63	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-SO ₂ NH ₂
XX.64	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-SOCH ₃
XX.65	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CHCl ₂	6-H
XX.66	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CHO	6-CH ₃
XX.67	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl	6-H
XX.68	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-Cl	6-H
XX.69	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN	6-H
XX.70	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CN	6-H
XX.71	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COCH ₃	6-H
XX.72	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CON(CH ₃) ₂	6-H
XX.73	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONH ₂	6-H
XX.74	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ C ₆ H ₅	6-H
XX.75	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.76	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHCH ₃	6-H
XX.77	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-CONHSO ₂ CH ₃	6-CH ₃

XX.78	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.79	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₂ F	6-H
XX.80	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₂ CH ₃	6-H
XX.81	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃	6-CH ₃
XX.82	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOCH ₃	6-H
XX.83	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOH	6-H
XX.84	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-COOH	6-H
XX.85	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-F	6-H
XX.86	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-(1-CH ₃ -cC ₃ H ₄)
XX.87	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-(4-F-C ₆ H ₄)
XX.88	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-(4-F-C ₆ H ₄)
XX.89	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-Br
XX.90	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-C(CH ₃) ₃
XX.91	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-c-C ₃ H ₅
XX.92	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-c-C ₅ H ₉
XX.93	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-C ^o CH
XX.94	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-C ₆ H ₅
XX.95	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-C ₆ H ₅
XX.96	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CF ₃
XX.97	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CF ₃
XX.98	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH(CH ₃) ₂
XX.99	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH=CHCN
XX.100	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH=CHNO ₂
XX.101	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH=NOCH ₃
XX.102	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ (4-CF ₃ -C ₆ H ₄)
XX.103	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ C ^o CH
XX.104	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ C ₆ H ₅
XX.105	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ C ₆ H ₅
XX.106	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ CF ₃
XX.107	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ CH=CH ₂
XX.108	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ CH ₂ CH ₂ CH ₃
XX.109	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ CH ₂ CH ₃

XX.110	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ CH ₃
XX.111	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ CONH ₂
XX.112	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ NHCOCH ₃
XX.113	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ OCH ₂ CH ₃
XX.114	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ OCH ₃
XX.115	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₂ SO ₂ C ₆ H ₅
XX.116	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₃
XX.117	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₃
XX.118	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₃
XX.119	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CHO
XX.120	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-Cl
XX.121	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-Cl
XX.122	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CN
XX.123	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COCH ₃
XX.124	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CON(CH ₃) ₂
XX.125	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CON(CH ₃)C ₂ H ₅
XX.126	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CONHCH ₂ C ₆ H ₅
XX.127	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CONHCH ₂ CH ₂ C(CH ₃)CF ₂
XX.128	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CONHCH ₂ CH ₂ CH ₃
XX.129	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOC ₆ H ₅
XX.130	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOCH ₂ CH ₂ C(CH ₃)CF ₂
XX.131	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOCH ₂ CH ₂ F
XX.132	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOCH ₃
XX.133	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOCH ₃
XX.135	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOH
XX.136	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-F
XX.137	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H
XX.138	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCH ₂ CH ₃
XX.139	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCH ₂ CH ₃
XX.140	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCOC ₂ H ₅
XX.141	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCOC ₆ H ₅
XX.142	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCOCF ₃

XX.143	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCOCH ₃
XX.144	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCOOCH ₃
XX.145	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCSCH ₂ CH ₃
XX.146	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHCSNHCH ₂ CH ₃
XX.147	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NHSO ₂ CH ₃
XX.148	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NO ₂
XX.149	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OC ₄ H ₉
XX.150	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OC ₅ H ₁₁
XX.151	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OC ₆ H ₅
XX.152	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OC ₆ H ₅
XX.153	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCF ₂ CF ₂ H
XX.154	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCF ₃
XX.155	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCF ₃
XX.156	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH(CH ₃)C ₂ H ₅
XX.157	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ (4-Cl-C ₆ H ₄)
XX.158	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ (4-Cl-C ₆ H ₄)
XX.159	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ C ₆ H ₅
XX.160	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CCl=CH ₂
XX.161	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH=CCl ₂
XX.162	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH=CH ₂
XX.163	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH=CH ₂
XX.164	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH ₂ CH ₃
XX.165	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH ₂ COOCH ₃
XX.166	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH ₂ COOCH ₃
XX.167	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH ₂ C(CH ₃)CF ₂
XX.168	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH ₃
XX.169	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ COOH
XX.170	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₃
XX.171	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₃
XX.172	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCOC ₂ H ₅
XX.173	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCOC ₆ H ₅
XX.174	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OH

XX.175	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OH
XX.176	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SCF ₃
XX.177	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SCF ₃
XX.178	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SCH ₂ CH ₂ CH ₃
XX.179	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SCH ₂ CH ₂ C(CH ₃)CF ₂
XX.180	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SCH ₃
XX.181	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SCH ₃
XX.182	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SO ₂ NHCH ₃
XX.183	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SOCF ₃
XX.184	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SOCH ₂ CH ₂ C(CH ₃)CF ₂
XX.185	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NH ₂	6-CH ₃
XX.186	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCH ₂ CH ₃	6-C ₆ H ₅
XX.187	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCH ₂ CH ₃	6-H
XX.188	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCHO	6-H
XX.189	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃	6-CH ₃
XX.190	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCH ₃	6-C ₆ H ₅
XX.191	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCH ₃	6-H
XX.192	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCONH ₂	6-CH ₃
XX.193	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOOCH ₃	6-H
XX.194	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NHSO ₂ CH ₃	6-CH ₃
XX.195	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NMe ₂	6-H
XX.196	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂	6-C ₆ H ₅
XX.197	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂	6-H
XX.198	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅	6-H
XX.199	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅	6-H
XX.200	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OC ₆ H ₅	6-NHCOCH ₃
XX.201	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₂ CF ₂ H	6-CH ₃
XX.202	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₂ H	6-H
XX.203	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃	6-H
XX.204	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCF ₃	6-H
XX.205	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH(CH ₃) ₂	6-H
XX.206	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH(CH ₃)C ₂ H ₅	6-H

XX.207	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ (4-Cl-C ₆ H ₄)	6-H
XX.208	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ (4-Cl-C ₆ H ₄)	6-H
XX.209	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ C ₆ H ₅	6-H
XX.210	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CCl=CH ₂	6-H
XX.211	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CF ₃	6-H
XX.212	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH=CH ₂	6-H
XX.213	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ COOCH ₃	6-CH ₃
XX.214	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ COOCH ₃	6-H
XX.215	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ COOCH ₃	6-H
XX.216	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.217	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ F	6-CH ₃
XX.218	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₃	6-H
XX.219	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ COOCH ₃	6-H
XX.220	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ COOH	6-H
XX.221	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃	6-H
XX.222	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOC ₂ H ₅	6-H
XX.223	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOC ₆ H ₅	6-H
XX.224	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OCOCH ₃	6-CH ₃
XX.225	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-OH	6-C ₆ H ₅
XX.226	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OH	6-CH ₃
XX.227	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OH	6-H
XX.228	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-OSO ₂ CH ₃	6-H
XX.229	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCF ₃	6-H
XX.230	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCF ₃	6-H
XX.231	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.232	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ CH ₃	6-H
XX.233	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.234	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃	6-H
XX.235	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-SCH ₃	6-H
XX.236	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NH ₂	6-CH ₃
XX.237	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SO ₂ NHCH ₃	6-H
XX.238	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCF ₃	6-H

XX.239	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-SOCH ₃	6-CH ₃
XX.240	3-CH ₃	5-CH ₃	6-SCH ₂ CH ₂ C(CH ₃)CF ₂
XX.241	3-CH ₃	5-H	6-SCH ₂ CH ₂ C(CH ₃)CF ₂
XX.242	3-CH ₃	5-OC ₄ H ₉	6-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂
XX.243	3-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂	6-CH ₃
XX.244	3-CH ₃	5-SCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.245	3-H	5-CH ₃	6-SCH ₂ CH ₂ C(CH ₃)CF ₂
XX.246	3-H	5-H	6-CH ₂ CH ₂ C(CH ₃)CF ₂
XX.247	3-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂	6-CH ₃
XX.248	3-H	5-SCH ₂ CH ₂ C(CH ₃)CF ₂	6-H
XX.249	3-H	5-SOCH ₂ CH ₂ C(CH ₃)CF ₂	6-CH ₃
XX.250	3-H	5-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	6-CH ₃
XX.251	3-SCH ₂ CH ₂ C(CH ₃)CF ₂	-(CH ₂ CH ₂ CH ₂ CH ₂)-	
XX.252	3-SOCH ₂ CH ₂ C(CH ₃)CF ₂	-(CH ₂ CH ₂ CH ₂ CH ₂)-	
XX.253	3-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	-(CH ₂ CH ₂ CH ₂ CH ₂)-	

Examples of compounds of Formula (XXI) according to the invention are set out in Table XXI.

TABLE XXI

No.	R ₂	R ₄	R ₆
XXI.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-H	6-H

TABLE XXII

No.	R2	R5	R6	R7	R8
XXII.1	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-H
XXII.2	2- SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-F
XXII.3	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-CH ₃	8-H
XXII.4	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-NHCOCH ₃	8-H
XXII.5	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-H
XXII.6	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-COOH	8-H
XXII.7	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-F	8-H
XXII.8	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	4-CH ₃	6-H	7-H	8-H
XXII.9	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-CN
XXII.10	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CH ₃	7-H	8-H
XXII.11	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-Cl	7-H	8-H
XXII.12	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-Cl	7-Cl	8-H
XXII.13	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-cC ₃ H ₅ -1-CH ₃	8-H
XXII.14	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OH	8-Cl
XXII.15	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OC ₂ H ₅ CF ₃	8-H
XXII.16	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OC ₂ H ₅ CH ₃	8-H
XXII.17	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-CH ₂ OC ₂ H ₅

XXII.18	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II		-CH=CH-CH=CH-	8-II
XXII.19	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-Cl	8-II
XXII.20	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-NHCO ₂ H ₅	8-II
XXII.21	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-NHSO ₂ CH ₃	8-II
XXII.22	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-NO ₂	8-II
XXII.23	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-OC ₂ H ₅	8-II
XXII.24	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-OCH ₃	8-II
XXII.25	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-Cl	6-II	7-OCH ₃	8-II
XXII.26	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-Br	7-II	8-II
XXII.27	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-CF ₃	7-II	8-II
XXII.28	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-Cl	7-II	8-II
XXII.29	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-COOCH ₂ CH ₂ CH ₂ CF ₂	7-II	8-II
XXII.30	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-CONH ₂	7-II	8-II
XXII.31	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-COCNCH ₂ CH ₂ CH ₃	7-II	8-II
XXII.32	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-CON(CH ₃) ₂	7-II	8-II
XXII.33	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-COOH	7-II	8-II
XXII.34	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-F	7-II	8-II
XXII.35	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-NHCO ₂ H ₅	7-II	8-II
XXII.36	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-OCH ₃	7-II	8-II
XXII.37	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-SCH ₃	7-II	8-II
XXII.38	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-SO ₂ CH ₃	7-II	8-II

XXII.39	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-SO ₂ N(CH ₃) ₂	7-II	8-II
XXII.40	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-II	8-Cl
XXII.41	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-SCl ₃	8-II
XXII.42	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-Br	7-II	8-II
XXII.43	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-Br	7-II	8-II
XXII.44	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-CN	7-II	8-II
XXII.45	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-COOCH ₂ CH ₂ CHCF ₂	7-II	8-II
XXII.46	2-SO ₂ CH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-COOCH ₂ CH ₂ CHCF ₂	7-II	8-II
XXII.47	2-SOCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-F	7-II	8-II
XXII.48	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-OCF ₃	7-II	8-II
XXII.49	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-SO ₂ NH ₂	8-II
XXII.50	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-SO ₂ NH ₂	8-II
XXII.51	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-OCH ₃	7-II	8-II
XXII.52	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-CONHCH ₃	7-II	8-II
XXII.53	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-SO ₂ NHCH ₃	7-II	8-II
XXII.54	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-SO ₂ C ₃ H ₅	7-II	8-II
XXII.55	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-CSNH ₂	7-II	8-II
XXII.56	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-NO ₂	7-II	8-II
XXII.57	2-SCH ₂ CH ₂ C(CH ₃)CF ₂	5-II	6-II	7-II	8-NO ₂

XXII.58	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	-O-CH ₂ -O-	8-H
XXII.59	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-SO ₂ F	8-H
XXII.60	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-OCH ₃	7-H	8-H
XXII.61	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-OCH ₃	8-H
XXII.62	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-H
XXII.63	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-SO ₂ CH ₃	8-H
XXII.64	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-NHCO ₂ C ₆ H ₅	8-H
XXII.65	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	4-Cl	7-H	8-H
XXII.66	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-Br
XXII.67	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-H
XXII.68	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-H
XXII.69	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-H
XXII.70	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-H
XXII.71	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	7-H	8-H

Examples of compounds of Formula (XXIII) according to the present invention are set out in Table XXIII.

TABLE XXIII

No.	R ₂	R ₅	R ₆	R ₇	R ₈
XXIII.1	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	6-H	7-H	8-H
XXIII.2	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	6-F	7-H	8-H
XXIII.3	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	6-H	7-NO ₂	8-H
XXIII.4	2-SC ₁₁ H ₂ C ₁₁ H ₂ C(C ₁₁ H ₃)CF ₂	5-H	6-H	7-NH ₂	8-H

XXIII.5	2-SClI2ClI2C(ClI3)CF2	5-H	6-F	7-H	8-F
XXIII.6	2-SOClI2CH2C(ClI3)CF2	5-H	6-H	7-H	8-H
XXIII.7	2-SClI2ClI2C(CH3)CF2	5-H	6-H	7-CO2ClI3	8-H
XXIII.8	2-SO2ClI2CH2(ClI3)CF2	5-H	6-H	7-H	8-H
XXIII.9	2-SClI2CH2C(CH3)CF2	5-H	6-H	7-H	8-ClI3
XXIII.10	2-SClI2ClI2C(ClI3)CF2	5-H	6-H	7-H	8-ClI2ClI1=ClI2
XXIII.11	2-SClI2CH2C(CH3)CF2	5-H	6-H	7-H	8-cC3H5
XXIII.12	2-SClI2ClI2C(ClI3)CF2	5-H	6-H	7-H	8-Cl
XXIII.13	2-SClI2CH2C(ClI3)CF2	5-H	6-CH2CH=CH2	7-H	8-H
XXIII.14	2-SClI2CH2C(ClI3)CF2	5-H	6-cC3H5	7-H	8-H
XXIII.15	2-SClI2CH2C(CH3)CF2	5-H	6-C6H5	7-H	8-H
XXIII.16	2-SClI2ClI2C(ClI3)CF2	5-H	6-CH3	7-CH3	8-H
XXIII.17	2-SClI2ClI2C(ClI3)CF2	5-H	6-Cl	7-F	8-H
XXIII.18	2-SClI2ClI2C(ClI3)CF2	5-H	6-H	7-OCH3	8-NHCOC(I)3
XXIII.19	2-SClI2CH2C(CH3)CF2	5-H	6-H	7-OCH3	8-OCH3
XXIII.20	2-SClI2ClI2C(CH3)CF2	5-H	6-OCH3	7-OCH3	8-H
XXIII.21	2-SClI2ClI2C(ClI3)CF2	5-H	6-F	7-OH	8-H
XXIII.22	2-SClI2ClI2C(ClI3)CF2	5-H	6-H	7-H	8-CO2CH3
XXIII.23	2-SO2ClI2CH2C(CH3)CF2	5-H	6-H	7-OClI3CF3	8-H
XXIII.24	2-SClI2ClI2C(ClI3)CF2	5-H	6-ClI3	7-H	8-H
XXIII.25	2-SClI2ClI2C(ClI3)CF2	5-H	6-H	7-H	8-CN

XXIII.26	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H		-CH=CH-CH=CH-	8-H
XXIII.27	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-Cl	8-H
XXIII.28	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-F	8-H
XXIII.29	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-CH ₃	8-H
XXIII.30	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-NHCOCCH ₃	8-H
XXIII.31	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-N(SO ₂ CH ₃) ₂	8-H
XXIII.32	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OH	8-H
XXIII.33	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OCOCCH ₃	8-H
XXIII.34	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OCCH ₃	8-H
XXIII.35	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OSO ₂ CH ₃	8-H
XXIII.36	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SO ₂ C ₂ H ₅	7-H	8-H
XXIII.37	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SO ₂ N(C ₂ H ₅) ₂	7-H	8-H
XXIII.38	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-F
XXIII.39	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-CH ₃	6-H	7-H	8-H
XXIII.40	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-NH ₂	6-H	7-H	8-H
XXIII.41	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-NO ₂	6-H	7-H	8-H
XXIII.42	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-OH	6-H	7-H	8-H
XXIII.43	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-OCCH ₂ CH ₂ F	6-H	7-H	8-H
XXIII.44	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-COOH	8-H
XXIII.45	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-NHCH ₂ O	8-H
XXIII.46	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-Cl	7-H	8-H

XXIII.47	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CN	7-H	8-H
XXIII.48	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-COOH	7-H	8-H
XXIII.49	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-COOH	6-H	7-H	8-H
XXIII.50	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOC ₂ H ₅	6-H	7-H	8-H
XXIII.51	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-NH ₂ SO ₂ CH ₃	6-H	7-H	8-H
XXIII.52	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-OCOC ₂ H ₅	6-H	7-H	8-H
XXIII.53	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₂ CH ₂ CHCF ₂	6-H	7-H	8-H
XXIII.54	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-OCH ₃	6-H	7-H	8-H
XXIII.55	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NH ₂	7-H	8-H
XXIII.56	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OC ₂ H ₂ CCl=CH ₂	8-H
XXIII.57	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OCH ₂ CH=CCl ₂	7-H	8-H
XXIII.58	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-OC ₂ H ₂ CO ₂ C ₂ H ₅	7-H	8-H
XXIII.59	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-CN	8-H
XXIII.60	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-CONH ₂	8-H
XXIII.61	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-CON(C ₂ H ₅)C ₂ H ₅	8-H
XXIII.62	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OCH ₂ CH ₂ F	8-H
XXIII.63	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OC ₂ H ₂ CH ₂ CH ₃	8-H
XXIII.64	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-OCH(C ₂ H ₅)C ₂ H ₅	8-H
XXIII.65	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-SC ₂ H ₃	7-H	8-H
XXIII.66	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-H	7-H	8-NO ₂
XXIII.67	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NO ₂	7-H	8-NO ₂

XXIII.68	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CF ₃	7-H	8-H
XXIII.69	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-NO ₂	7-H	8-H
XXIII.70	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-H	6-CO ₂ CH ₂ CH ₂ CHCF ₂	7-H	8-H
XXIII.71	2-SCl ₂ CH ₂ C(CH ₃)CF ₂	5-NHCOCF ₃	6-H	7-H	8-H

Examples of compounds of Formula (XXIV) according to the present invention are set out in Table XXIV.

TABLE XXIV

COMPOUND	R4	R5	R6	R2
XXIV.1	4-H	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.2	4-H	5-H	6-H	2-S(O)CH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.3	4-CF ₃	5-H	6-OCH ₃	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.4	4-C ₆ H ₅	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.5	4-SCl ₂ CH ₂ C(CH ₃)=CF ₂	5-H	6-H	2-H
XXIV.6	4-OC ₂ H ₅	5-CH ₃	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.7	4-OC ₃ H ₇	5-H	6-n-C ₄ H ₉	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.8	4-OC ₃ H ₁₁	5-H	6-H	2-S(O) ₂ CH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.9	4-OC ₄ H ₉	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.10	4-OC ₂ H ₅ CH=CHCH ₃	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.11	4-OH	5-H	6-n-C ₄ H ₉	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.12	4-CF ₃	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.13	4-SCl ₂ CH ₂ C(CH ₃)=CF ₂	5-H	6-OCH ₂ CF ₃	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.14	4-C ₁₁ H ₂₃	5-H	6-OCH ₂ CH ₃	2-H
				2-SCH ₂ CH ₂ C(CH ₃)=CF ₂

XXIV.15	4-Cl	5-H	6-n-C ₁₁ H ₇	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.16	4-OC ₁₁ H ₂₃	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.17	4-OC ₁₁ H ₂₃ CO ₂ CH ₃	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.18	4-n-C ₁₁ H ₇	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.19	4-OC ₁₁ H ₂₃ (4-Cl-C ₆ H ₄)	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.20	4-OC ₁₁ H ₂₃ CO ₂ H	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.21	4-OC ₁₁ H ₂₃ CF ₃	5-H	6-CH(CH ₃) ₂	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.22	4-Cl	5-H	6-CH(CH ₃) ₂	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.23	4-O(CH ₂) ₂ CO ₂ CH ₃	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.24	4-OC ₁₁ H ₂₃	5-H	6-CH(CH ₃) ₂	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.25	4-CH(CH ₃) ₂	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.26	4-SCl ₂ CH ₂ C(CH ₃)=CF ₂	5-H	6-CH ₃	2-C ₆ H ₅
XXIV.27	4-SCl ₂ CH ₂ C(CH ₃)=CF ₂	5-H	6-H	2-CH ₃
XXIV.28	4-OC ₁₁ H ₂₃	----- (CH ₂) ₄ -----		2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.29	4-CH ₃	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.30	4-CH ₃	5-H	6-H	2-S(O)CH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.31	4-H	5-C(CH ₃) ₃	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.32	4-H	5-CF ₃	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.33	4-H	5-CH(CH ₃) ₂	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.34	4-H	5-Cl	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.35	4-H	5-C ₆ H ₅	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.36	4-SCl ₂ CH ₂ CH=CF ₂	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.37	4-OC ₁₁ H ₂₃ CH=CF ₂	5-H	6-H	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.38	4-H	----- (CH ₂) ₄ -----		2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.39	4-CH ₃	5-CH ₃	6-CH ₃	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂

XXIV.40	4-SCH ₂ CH ₂ CH=CF ₂	5-CH ₃	6-SCH ₂ CH ₂ C(CH ₃)=CF ₂	2-II
XXIV.41	4-C≡CH	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.42	4-C≡N	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.43	4-(4-F-C ₆ H ₄)	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.44	4-(3-F-C ₆ H ₄)	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.45	4-(4-CF ₃ -C ₆ H ₄)CH ₃	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.46	4-C ₆ H ₅	5-II	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.47	4-(1-CH ₃ -C ₆ H ₅)	5-II	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.48	4-CH ₂ CF ₃	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.49	4-OCCH ₂ CF ₃	5-II	6-Cl	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.50	4-CH ₂ OCCH ₃	5-II	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.51	4-Cl	5-H	6-Cl	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.52	4-SCH ₂ CH ₂ C(CH ₃)=CF ₂	5-II	6-OCH ₂ CH ₂ CH=CF ₂	2-II
XXIV.53	4-F	5-II	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.54	4-SCH ₃	5-II	6-F	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.55	4-C(CH ₃) ₃	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.56	4-C(CH ₃) ₃	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.57	4-II	--CH==CH--CH==CH--		2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.58	4-II	--CH==CH--CH==CH--		2-S(O)CH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.59	4-II	--CH==CH--CH==CH--		2-S(O) ₂ CH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.60	4-OH	--CH==CH--CH==CH--		2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.61	4-CF ₃ CF ₃	5-II	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.62	4-CH(OCCH ₃) ₂	5-H	6-H	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.63	4-Cl	5-II	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.64	4-NH ₂	5-NH ₂	6-II	2-SCH ₂ CH ₂ C(CH ₃)=CF ₂

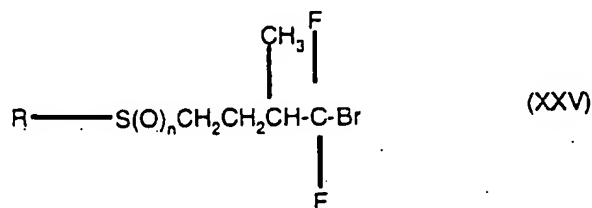
XXIV.65	4-OCII ₂ CF ₃	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.66	4-OCII ₂ CF ₃	5-II	6-II	2-S(O)CH ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.67	4-OCII ₂ CH=CH ₂	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.68	4-OCII ₂ CH ₂ CH=CF ₂	5-II	6-CF ₃	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.69	4-OC ₂ II ₅	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.70	4-OII	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.71	4-OII	5-CH ₃	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.72	4-OII	5-II	6-CF ₃	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.73	4-OCII(CHII) ₂	5-II	6-H	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.74	4-OC ₆ II ₅	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.75	4-C ₆ II ₅	5-II	6-OC ₂ II ₅	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.76	4-(3-CF ₃ -C ₆ H ₄)	5-II	6-H	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.77	4-(4-NO ₂ -C ₆ H ₄)	5-II	6-H	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.78	4-SCII ₂ CH ₂ C(CH ₃)=CF ₂	5-II	6-SCH ₃	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.79	4-CII=CF ₂	5-H	6-II	2-H
XXIV.80	4-CIIO	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.81	4-CONII ₂	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.82	4-COOH	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.83	4-COOCH ₃	5-II	6-H	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.84	4-II	5-NO ₂	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.85	4-II	5-SCH ₂ CH ₂ C(CH ₃)=CF ₂	6-H	2-H
XXIV.86	4-CH ₃	5-CH ₂ C ₆ II ₅	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.87	4-CH ₃	5-COC ₆ II ₅	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.88	4-OCII ₂ CCl=CH ₂	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.89	4-OCII ₂ CH=CCl ₂	5-II	6-II	2-SCII ₂ CH ₂ C(CH ₃)=CF ₂

XXIV.90	4-C ₆ H ₅	5-CO ₂ C ₂ H ₅	6-II	2-SCl ₂ CH ₂ C(CH ₃)=CF ₂
XXIV.91	4-II	5-II	6-II	2-SO ₂ CH ₂ CHC(CH ₃)CF ₂

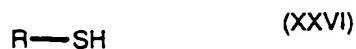
^c indicates a cyclic substituent

The compounds of formula (I) wherein n is 0 may be prepared by a variety of methods.

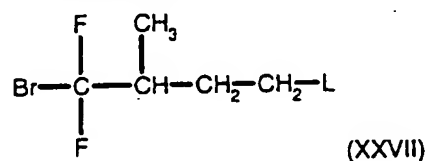
Compounds of Formula (I) may be prepared by dehydrobromination of the corresponding compound of Formula (XXV):



for example by treatment of the compound of Formula (XXV) with a base such as an alkali metal hydroxide, for example potassium or sodium hydroxide, in the presence of an inert solvent, for example dimethylformamide. Compounds of Formula (XXV) may be prepared from the corresponding thiol compound of Formula (XXVI):

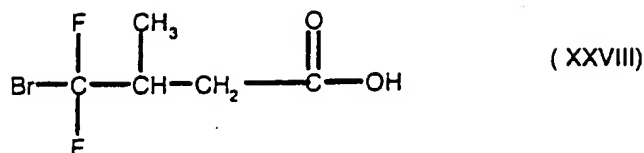


by reaction of the compound of Formula (XXVI) with a compound of Formula (XXVII):

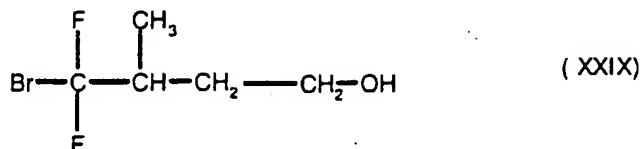


wherein L is a readily displaceable leaving group such as iodo, bromo, methanesulphonyloxy and especially para-toluenesulphonyloxy, under conditions well known in the art for such displacement reactions, for example in the presence of a mild base such as an alkali metal carbonate, for example potassium or sodium carbonate, in an inert solvent, at a temperature in the range from 0 °C to 200 °C, preferably 40 °C to 100 °C, and most conveniently at the reflux temperature of a suitable inert solvent such as acetone which has a boiling point within this range.

Compounds of Formula (XXVII) may be prepared by the following sequence of reactions. Crotonic acid ($\text{CH}_3\text{CH}=\text{CHCO}_2\text{H}$, commercially available) is reacted with dibromodifluoromethane (CF_2Br_2) under the conditions described by Rong and Keese in Tetrahedron Letters, 1990, page 5616, in the presence of acetonitrile, water, sodium dithionite ($\text{Na}_2\text{S}_2\text{O}_4$) and sodium bicarbonate, to give the compound of Formula (XXVIII):



The compound of Formula (XXIX):



is then prepared by reduction of the compound of Formula (XXVIII) under conditions well known in the art for the reduction of an acid group to a primary alcohol, for example using lithium aluminium hydride in the presence of an inert solvent such as tetrahydrofuran.

Compounds of Formula (XXVII) may then be prepared from the compound of Formula (XXIX) by standard methods for the conversion of a primary hydroxyl group to a displaceable leaving group. In the case of compounds of Formula (XXVII) where L is methanesulphonyloxy or para-toluenesulphonyloxy, the compound of Formula (XXIX) may be reacted with methanesulphonyl chloride or para-toluenesulphonyl chloride. In the case of the compound of Formula (XXVII) where L is iodo or bromo, the compound of Formula (XXIX) may be reacted with an alkali metal iodide or bromide, for example sodium or potassium iodide or bromide, under acidic conditions.

It will be appreciated by those skilled in the art that compounds of Formula (XXVI) may exist in tautomeric equilibrium between the equivalent mercapto and thione forms. For the sake of convenience, these compounds are referred to herein in their mercapto form unless otherwise stated.

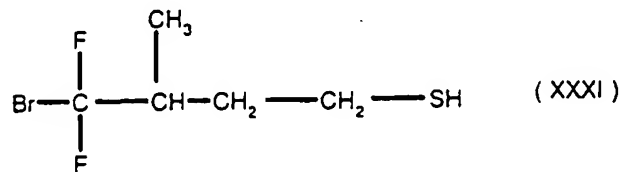
Compounds of Formula (XXVI) are commercially available or may be prepared from commercially available precursors by standard procedures well known in the art. For example, typical procedures suitable for the preparation of many of the relevant compounds of Formula (XXVI) where R is (XXII) or (XXIII) and their precursors may be found in the following standard references: Comprehensive Heterocyclic Chemistry (Published by Pergamon, Edited by Katritzky and Rees), 1984, e.g. pages 177-331; Journal of Organic Chemistry, 19, 758-766 (1954); Heterocyclic Compounds (Published by Wiley, Edited by Elderfield), Volume 5; Organic Compounds of Sulphur, Selenium and Tellurium (Published by The Chemical Society, Specialist Reports), Volumes 3, 4 and 5; Warburton et al, Chemical Reviews, 57, 1011-1020 (1957). By

way of example, many of the compounds of formula (XXVI), where R is (XXIII) may be prepared by reacting a correspondingly substituted 2-aminophenol or a salt thereof, with thiophosgene, in an inert solvent such as diethyl ether or chloroform, and optionally in the presence of a base, such as potassium carbonate, and/or water. Also by way of example, many of the compounds of formula (XXVI) where R is (XXII) may be prepared by the Herz Reaction (Warburton et al, Chemical Reviews, 57, 1011-1020 (1957)) in which appropriately substituted anilines are reacted sequentially with disulphur dichloride and aqueous sodium hydroxide to product the corresponding 2-mercapto aniline derivative, which is then reacted with carbon disulphide to produce the 2-mercaptobenzthiazole of formula (XXVI). Benzthiazoles of formula (XXVI) may also be prepared from appropriately substituted N-phenylthioureas by oxidation (for example in the presence of molecular bromine) and replacement of the amino group of the resulting 2-aminobenzthiazole with a 2-mercapto group by reaction with a base and carbon disulphide or by diazotisation, reaction with a halide and displacement of the 2-halo group using NaSH. N-phenylthioureas are available by reaction of the corresponding anilines with ammonium thiocyanate. Compounds of Formula (XXVI) may also be prepared by reaction of the correspondingly substituted 2-halonitrobenzene by reaction with sodium sulphide, sulphur (S₈), and carbon disulphide, or by reaction of the correspondingly substituted phenyl isothiocyanate with sulphur (S₈) to produce the corresponding 2-keto benzthiazole which may be readily converted to the corresponding 2-mercaptobenzthiazole of Formula (XXVI). All of these reactions are well documented in the chemical literature. The choice of the appropriate procedure will depend upon the particular nuclear substitution pattern required and is within the normal skill of the art. Typical examples are provided in the experimental examples.

Alternatively, the compounds of formula (I) may be prepared by reacting a corresponding compound of formula (XXX):



where L is again a good leaving group, with a mercapto compound of formula (XXXI):



under conditions well known in the art for such displacement reactions, with subsequent dehydrobromination. Preferably, L is halogen or a nitro group. Conveniently the reaction may be

carried out using a two phase solvent system, such as water/dichloromethane, in the presence of a phase transfer catalyst, for example tetra-n-butyl ammonium bromide, at ambient temperature under a nitrogen atmosphere.

The mercapto compound of formula (XXXI) is conveniently reacted in the form of its S-acetyl or its isothiuronium hydrogen bromide salt, which compounds are readily hydrolysed to the mercapto compound of formula (XXXI).

The compounds of formula (I) where n is 1 or 2, may be prepared by oxidising the correspondingly substituted compound of formula (I) when n is 0, using conventional methods, for example by treatment with a suitable oxidising agent in an inert organic solvent. In general, oxidation of a compound of Formula (I) with one equivalent of a suitable oxidising agent provides the corresponding compound wherein n is 1, and oxidation using two equivalents of the oxidising agent provides the corresponding compound wherein n is 2. Suitable oxidising agents include organic and inorganic peroxides such as peroxy carboxylic acids, or their salts, for example, meta-chloroperoxybenzoic acid, perbenzoic acid, magnesium monoperoxy-phthalic acid or potassium peroxymono-sulfate.

Thus, according to a further aspect of the present invention there is provided a process for the preparation of compounds of formula (I) where n is 1 or 2, which comprises oxidation of the correspondingly substituted compound of formula (I) when n is 0.

As well as the compounds of formula (I) being prepared from the corresponding substituted compounds, it will be appreciated that subsequent functional group transformations may be carried out using known chemistry to obtain the required ring substitution. Examples of such functional group transformations include the reduction of nitro groups to amine groups, halogenation, e.g. chlorination, hydrolysis of an ester to the acid, oxidation of an alcohol to the acid, salt formation.

Various further preferred features and embodiments of the present invention will now be described in further detail with reference to the following illustrative examples in which percentages are by weight and the following abbreviations are used: mp = melting point; bp = boiling point; g = grammes; gc = gas chromatography; NMR = nuclear magnetic resonance; s = singlet; d = doublet; dd = double doublet; t = triplet; q = quartet; m = multiplet; br = broad; M=mole; mM=millimoles; CDCl₃ = deuteriochloroform. Chemical shifts (δ) are measured in parts per million from tetramethylsilane. CDCl₃ was used as solvent for NMR spectra unless

otherwise stated. M^+ = molecular ion as determined by mass spectrometry; FAB = fast atom bombardment; tlc = thin layer chromatography.

Preparation 1

This describes the three-stage preparation of 4-bromo-4,4-difluoro-3-methylbutyl 2-methylbenzenesulphonate.

Step (a) - Preparation of 4-bromo-4,4-difluoro-3-methylbutanoic acid.

Two identical reactions were set up as follows. To a solution of 2-butenic acid (3.44g) in acetonitrile (160cm^3) was added sodium dithionite (8.36g), sodium bicarbonate (4.15g), water (40cm^3), and finally dibromodifluoromethane (10cm^3). The reaction mixture, which consisted of a biphasic solution containing solid inorganic salts, was stirred at room temperature for 4 hours after which the solid had dissolved and gc analysis indicated complete reaction. The combined reaction mixture from the two reactions was saturated with solid sodium chloride and the two phases separated. The organic phase was dried over MgSO_4 , filtered and evaporated under reduced pressure to give a pale yellow oil. This oil was taken up in ethyl acetate and filtered through silica to remove inorganic salts, leaving a bright yellow solution which was dried with MgSO_4 and evaporated as before to give 4-bromo-4,4-difluoro-3-methylbutanoic acid as a yellow oil (13.12g). ^1H NMR (CDCl_3) δ (ppm): 2.70-2.90(2H,m); 2.37(1H,brq); 1.23(3H,d).

Step (b) - Preparation of 4-bromo-4,4-difluoro-3-methylbutanol

To a stirred solution of 4-bromo-4,4-difluoro-3-methylbutanoic acid (6g) in dry tetrahydrofuran (120cm^3) at 0°C under nitrogen was added portionwise solid lithium aluminium hydride (1.156g), causing effervescence. The solution was stirred at 0°C for 1 hour and then allowed to warm to the ambient temperature, with stirring, over one hour. The reaction was quenched by the addition of water (1.2cm^3), 15% weight/volume aqueous sodium hydroxide (1.2cm^3) and water (3.6cm^3), which left a white precipitate and a clear organic phase. The reaction mixture was filtered through Celite (Trade Mark) which was washed copiously with ethyl acetate and the filtrate was evaporated under reduced pressure to give 4-bromo-4,4-difluoro-3-methylbutanol as a pale yellow oil (4.255g). ^1H NMR (CDCl_3) δ (ppm): 3.65-3.90(2H,t); 2.40(1H,m); 2.00(1H,m); 1.80(1H,m); 1.50(1H,m); 1.15(3H,d).

Step (c) - Preparation of 4-bromo-4,4-difluoro-3-methylbutylsulphonate

To a stirred solution of 4-bromo-4,4-difluoro-3-methylbutanol (2.63g) and tosyl chloride (p-toluenesulphonyl chloride, 2.58g) in dichloromethane (25cm^3) at the ambient temperature was added triethylamine (3.85cm^3) and dimethylaminopyridine (0.330g). The reaction was stirred for

45 minutes, during which time a white precipitate formed, and after which gc indicated complete consumption of tosyl chloride. The reaction mixture was partitioned between ethyl acetate and 2M HCl and the layers separated. The aqueous layer was extracted twice with ethyl acetate and the combined organic phases were washed with 2M HCl, water, brine and dried over MgSO_4 . Filtration and evaporation under reduced pressure gave 4-bromo-4,4-difluoro-3-methylbutyl p-tolysulphonate as a pale yellow oil (4.34g). ^1H NMR (CDCl_3) δ (ppm): 7.80(2H,d); 7.37(2H,d); 4.05-4.20 (2H,m); 2.45(3H,s); 2.00-2.40(2H,m); 1.60(1H,m); 1.08(3H,d).

Example 1: Preparation of 2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-chlorobenzothiazole.
(Compound XXII.28)

To a solution of 4-bromo-4,4-difluoro-3-methylbutyl p-methylbenzenesulfonate (0.5g) in acetone (7ml) was added 2-mercapto-5-chlorobenzothiazole (0.296g) and potassium carbonate (0.39g), which resulted in formation of a beige suspension. The reaction was heated at reflux for 1 hour after which gc analysis indicated complete consumption of starting material to give a single peak. The reaction was cooled and poured in to ethyl acetate and water. The layers were separated and the aqueous layer was extracted into ethyl acetate (2x). The combined organic layers were washed with 2M HCl, water and brine. The organic layer was dried (MgSO_4), filtered and evaporated under reduced pressure to give crude 2-(4-bromo-4,4-difluoro-3-methyl-butylthio)-5-chlorobenzothiazole as a brown oil (0.560g).

The above oil was then dissolved in dimethylformamide (5ml) and powdered potassium hydroxide (0.800g) was added resulting in a dark brown solution. The reaction was stirred at rt and gc analysis after 45 minutes indicated complete loss of starting material. The reaction mixture was poured into ethyl acetate and 2M HCl and the layers separated. The aqueous layer was extracted with ethyl acetate (2x). The combined organic layers were washed with 2M HCl, water and brine and dried (MgSO_4). The organic layer was then filtered and evaporated under reduced pressure to give a brown oil. Purification by column chromatography on silica gel using 6% diethylether in hexane as eluent gave 2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-chlorobenzothiazole. (0.215g). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.50 (2H,m); 3.40 (2H,t); 7.30 (1H,dd); 7.65 (1H,d); 7.85 (1H,d).

The following compounds were prepared using the general method described above:

2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-trifluoromethylbenzothiazole (Compound XXII.27). ^1H nmr (CDCl_3) δ 1.70 (3H,t); 2.50 (2H,m); 3.45 (2H,t); 7.55 (1H,d); 7.90 (1H,d); 8.10 (1H,bs).

(ii) 2-(4,4-difluoro-3-methyl-but-3-enylthio)benzothiazole (Compound XXII.1). ^1H nmr (CDCl_3) δ 1.70 (3H,t); 2.50 (2H,m); 3.40 (2H,t); 7.30 (1H,t); 7.40 (1H,t); 7.75 (1H,d); 7.85 (1H,d).

2-(4,4-difluoro-3-methyl-but-3-enylthio)-6-methoxybenzoxazole (Compound XXIII.34). ^1H nmr (CDCl_3) δ 1.70 (3H,t); 2.50 (2H,m); 3.35 (2H,t); 3.85 (3H,s); 6.89 (1H,dd); 7.00 (1H,d); 7.50 (1H,d).

2-(4,4-difluoro-3-methyl-but-3-enylthio)-6-nitrobenzothiazole (Compound XXII.22). ^1H nmr (CDCl_3) δ 1.70 (3H,t); 2.55 (2H,m); 3.50 (2H,t); 3.85 (3H,s); 7.90 (1H,d); 8.30 (1H,dd); 8.70 (1H,d).

2-(4,4-difluoro-3-methyl-but-3-enylthio)benzoxazole (Compound XXIII.1). ^1H nmr (CDCl_3) δ 1.70 (3H,t); 2.50 (2H,m); 3.40 (2H,t); 7.20-7.35 (2H,m); 7.45 (1H,dd); 7.60 (1H,dd).

2-(4,4-difluoro-3-methyl-but-3-enylthio)pyrimidine (Compound XXIV.1). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.40 (2H,m); 3.20 (2H,t); 6.95 (1H, t); 8.50 (2H, d).

2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-methyl-1,3,4-oxadiazole (Compound XII.49). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 2.45-2.50 (2H,m); 2.50 (3H,s); 3.30 (2H, t).

2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-phenyloxazole (Compound VI.121). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 2.45-2.55 (2H,m); 3.40 (2H, t); 7.30 (1H,s); 7.30 (1H,t); 7.40 (2H,t); 7.60 (2H,d).

2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-phenyl-1,3,4-oxadiazole (Compound XII.3). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.50-2.60 (2H,m); 3.30-3.40 (2H, t); 7.95-8.05 (2H,m); 7.45-7.60 (3H,m).

2-(4,4-difluoro-3-methyl-but-3-enylthio)thiazole (Compound VII.1). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.40-2.50 (2H,m); 3.30 (2H, t); 7.25 (1H,d); 7.70 (1H,m).

The following compounds were made according to the procedure outlined above but were not purified prior to oxidation in Examples (3.I. 3.II. 3.III and 3.IV (via Example 2);

2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-cyclopropyl-1,3,4-thiadiazole (Compound XIII.6). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 1.10-1.15 (2H,m); 1.15-1.25 (2H,m); 2.40-2.50 (2H,m); 2.30 (1H,m); .40 (2H, t).

2-(4,4-difluoro-3-methyl-but-3-enylthio)pyridine (Compound XVI.19). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 2.35-2.40(2H,m); 3.25 (2H,t); 7.00 (1H,dt); 7.20 (1H, d); 7.50 (1H,dt); 8.40-8.45 (1H,m).

2-(4,4-difluoro-3-methyl-but-3-enylthio)imidazole (Compound VIII.1). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.40-2.50 (2H,m); 3.30 (2H, t); 7.25 (1H,d); 7.70 (1H,m).

4-(4,4-difluoro-3-methyl-but-3-enylthio)pyridine (Compound XVI.5). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.40-2.50 (2H,m); 3.30 (2H, t); 7.25 (1H,d); 7.70 (1H,m).

Example 2 - Preparation of 2-(4,4-difluoro-3-methyl-but-3-enylthio)-1-propylimidazole. (Compound VIII.153)

To a solution of 2-(4,4-difluoro-3-methyl-but-3-enylthio)imidazole(0.220g) in dimethylformamide (5ml) was added sodium hydride (0.038g of an 80% suspension in oil) and the reaction was stirred at rt for 30 minutes. Propyl iodide (0.200g) was added and the reaction stirred at rt for 1 hour after which gc analysis indicated complete reaction. The reaction was poured into ethylacetate and water and the layers separated. The aqueous layer was extracted with ethyl acetate (2x). The combined organic fractions were washed alternately with water and brine (3x) and dried (MgSO_4). Filtration and evaporation under reduced pressure gave a yellow oil.

This material was carried forward to the oxidation step (Example 3.IV) without purification

Example 3 - Preparation of 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)pyrimidine. (Compound XXIV.91)

To a stirred solution of 2-(4,4-difluoro-3-methyl-but-3-enylthio)pyrimidine (0.371g) in dichloromethane (15ml) at rt was added, portionwise, *meta*-chloroperbenzoic acid (1.244g). The reaction mixture was stirred at room temperature for 2 hours and then left to stand at rt overnight. The reaction mixture was poured into aqueous sodium bicarbonate and extracted with dichloromethane. The combined organic layers were then dried (MgSO_4), filtered and evaporated under reduced pressure to give a yellow oil which crystallised on standing. The solid was triturated with hexane to give 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)pyrimidine, (compound XXIV.9) as a yellow solid (0.302g). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 2.50-2.60 (2H,m); 3.60-3.70 (2H,t); 7.60 (1H, t); 9.00 (2H, d).

The following compounds were made using the method described above and using the appropriate unoxidised starting materials:

- (I) 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)pyridine (Compound XVI.20). ^1H nmr (CDCl_3) δ 1.55 (3H,t); 2.40-2.50(2H,m); 3.45-3.50 (2H,m); 7.60 (1H,dt); 7.80 (1H, dt); 8.10 (1H,d); 8.80 (1H,dd).
- (II) 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)-5-cyclopropyl-1,3,4-thiadiazole (Compound XIII.7). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 1.25-1.30 (2H,m); 1.30-1.45 (2H,m); 2.45-2.50 (1H,m); 2.50-2.60 (2H,m); 3.60-3.65 (2H, t).
- (III) 4-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)pyridine (Compound XVI.6). ^1H nmr (CDCl_3) δ 1.60 (3H,t); 2.45 (2H,m); 3.20 (2H,t); 7.80 (2H,m); 8.30 (2H, m).
- (IV) 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)-1-propylimidazole (Compound VIII.155). ^1H nmr (CDCl_3) δ 0.95 (3H,t); 1.60 (3H,t); 1.90 (2H,m); 2.50 (2H,m); 3.60 (2H,m); 4.30 (2H,dd); 7.05 (1H,s); 7.20 (1H, s)..

Example 4 - Preparation of 2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-chlorothiazole. (Compound VII.24).

To a solution of 2-(4,4-difluoro-3-methyl-but-3-enylthio)thiazole (0.8g) in carbon tetrachloride (25ml) was added N-chlorosuccinimide (0.575g) and the reaction was heated to reflux for 3 hours and then allowed to cool. The reaction was filtered and the residue washed with carbon tetrachloride. The filtrate was evaporated under reduced pressure to give a yellow oil. Purification by column chromatography on silica gel using 5% diethylether in hexane gave 2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-chlorothiazole, compound VII.24, as an oil (0.35g). ^1H nmr (CDCl_3) δ 1.65 (3H,t); 2.40 (2H,m); 3.25 (2H, t); 7.43(1H,s).

Example 5 - Preparation of 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)-5-chlorothiazole (Compound VII.26).

To a solution of 2-(4,4-difluoro-3-methyl-but-3-enylthio)-5-chlorothiazole (0.128g) in methanol (5ml), cooled in a methanol ice bath, was added magnesium monoperoxyphthalate (MMPP) (0.556g). After stirring for 1.5 hours tlc analysis indicated no starting material present, but some sulfoxide still remaining. A further 0.1g of MMPP was added and the reaction stirred for a further 1 hour after

which tlc analysis indicated complete reaction. The reaction was flooded with diethylether and the white ppt filtered off and washed with diethylether. The diethylether filtrate was then washed with water and brine and dried (MgSO₄). Filtration and evaporation under reduced pressure gave a solid which was repeatedly washed with chloroform. The chloroform washings were evaporated under reduced pressure to give an oil. Purification by column chromatography on silica gel using a gradient of 10% by 15% diethylether in hexane gave 2-(4,4-difluoro-3-methyl-but-3-enylsulfonyl)-5-chlorothiazole, compound VII.26, as an oil (0.04g). ¹H nmr (CDCl₃) δ 1.60 (3H,t); 2.50-2.55 (2H,m); 3.40-3.50 (2H, m); 7.85 (1H,s).

The compounds of formula (I) are nematocidal and can be used to control nematodes in plants. Thus, in a further aspect of the present invention, there is provided a method of killing or controlling nematodes, which comprises applying a compound of formula (I) to the nematode.

The term "controlling" extends to non-lethal effects which result in the prevention of damage to the host plant and the limitation of nematode population increase. The effects may be the result of chemical induced disorientation, immobilisation, or hatch prevention or induction. The chemical treatment may also have deleterious effects on nematode development or reproduction.

The compounds of the present invention can be used against both plant parasitic nematodes and nematodes living freely in the soil.

Examples of plant-parasitic nematodes are: ectoparasites, for example, Xiphinema spp., Longidorus spp., and Trichodorus spp.; semi-parasites, for example, Tylenchulus spp.; migratory endoparasites, for example, Pratylenchus spp., Radopholus spp. and Scutellonema spp.; sedentary parasites, for example, Heterodera spp., Globodera spp. and Meloidogyne spp.; and stem and leaf endoparasites, for example, Ditylenchus spp., Aphelenchoides spp. and Hirschmaniella spp.

The compounds of formula (I) also display activity against different types of nematodes including cyst nematode.

The compounds of the present invention also exhibit activity against other pests of growing and stored agronomic crops, forestry, greenhouse crops, ornamentals, nursery crops, stored food and fibre products. These pests include:

Heteroptera/Homoptera including Myzus persicae, Aphis gossypii, Aphis fabae, Rhopalosiphum padi, Aonidiella spp., Trialeurodes spp., Bemisia tabaci, Nilaparvata lugens, Nephotettix cincticeps, Nezara viridula, Dysdercus suturellus, Dysdercus fasciatus, and Lygus lineoralis.

Diptera including Ceratitis capitata, Tipula spp., Oscinella frit, Liriomyza spp., Delia spp., and Peromya spp.

Lepidoptera including Pieris brassicae, Plutella xylostella, Spodoptera littoralis and other Spodoptera spp., Heliothis virescens and other Heliothis and Helicoverpa spp., and Chilo partellus.

Coleoptera including Phaedon cochleariae, Diabrotica spp., Agrotis spp., and Leptinotarsa decemlineata.

Blattodea including Blattella germanica, Periplaneta americana, and Blatta orientalis. Orthoptera including Chortiocetes terminifera, Schistocerca spp., Locusta spp. and Scapteriscus spp..

Acanthi including Panonychus ulmi, Panoychus citri, Tetranychus urticae, Tetranychus cinnabarinus, Phyllocoptruta oleivora, and Brevipalpus spp.

The compounds can also be used against livestock, household, public and animal health pests such as:

Siphonaptera including Ctenocephalides felis, Ctenocephalides canis, Xenopsylla cheopis, and Pulex irritans.

Mallophaga including Menopon gallinae, and Cuclotogaster heterographus.

Anoplura including Pediculus humanus capitis, Pediculus humanus humanus, and Phthirus pubis.

Diptera including Musca domestica, Aedes aegypti, Anopheles gambiae, Culex quinquefasciatus, Chrysops discalis, and Tabanus nigrovittatus.

Sarcophagidae including Sarcophaga haemorrhoidalis and Wohlfahrtia magnifica.

Calliphoridae including Lucilia cuprina and Cordylobia anthropophaga.

Oestridae including Oestrus ovis.

Generally, the compounds may be used to combat and control pests injurious to and/or associated with the transmission of diseases of man and animals. The pests which may be combated and controlled by the use of the compounds of the invention parasitic nematodes of animals, including mammals, which may be found in the gastrointestinal tract, the air passages or blood vessels of the respiratory tract and the heart, together with the associated blood vessels.

The compounds of formula (I) may be used to treat vertebrates, such as mammals (for example, man, pigs, sheep, cattle, equines, cats and dogs), birds (for example, chicken, ducks, turkeys, geese, canaries and budgerigars), and fish (for example, salmon, trout and ornamental fish).

The nematode and other pests may be killed/controlled by applying an effective amount of one or more of the compounds of the present invention to the environment of the pests, to the area to be protected, as well as directly on the pests.

In order to apply the compound to the locus of the nematode, insect or acarid pest, or to a plant susceptible to attack by the nematode, insect or acarid pest, the compound is usually formulated into a composition which includes in addition to the compound of formula (I) suitable inert diluent or carrier materials, and/or surface active agents. Thus in two further aspects of the invention there is provided a nematicidal, insecticidal or acaricidal composition comprising an effective amount of a compound of formula (I) as defined herein and an inert diluent or carrier material and optionally a surface active agent.

The amount of composition generally applied for the control of nematode pests gives a rate of active ingredient from 0.01 to 10 kg per hectare, preferably from 0.1 to 6 kg per hectare.

The compositions can be applied to the soil, plant, seed, or other area to be protected, to the locus of the pests, or to the habitat of the pests, in the form of dusting powders, wettable powders, granules (slow or fast release), emulsion or suspension concentrates, liquid solutions, emulsions, seed dressings, fogging/smoke formulations or controlled release compositions, such as microencapsulated granules or suspensions.

Dusting powders are formulated by mixing the active ingredient with one or more finely divided solid carriers and/or diluents, for example natural clays, kaolin, pyrophyllite, bentonite, alumina, montmorillonite, kieselguhr, chalk, diatomaceous earths, calcium phosphates, calcium and magnesium carbonates, sulfur, lime, flours, talc and other organic and inorganic solid carriers.

Granules are formed either by absorbing the active ingredient in a porous granular material for example pumice, attapulgite clays, fuller's earth, kieselguhr, diatomaceous earths, ground corn cobs, and the like, or on to hard core materials such as sands, silicates, mineral carbonates, sulfates, phosphates, or the like. Agents which are commonly used to aid in impregnation, binding or coating the solid carriers include aliphatic and aromatic petroleum solvents, alcohols, polyvinyl acetates, polyvinyl alcohols, ethers, ketones, esters, dextrans, sugars and vegetable oils, with the active ingredient. Other additives may also be included, such as emulsifying agents, wetting agents or dispersing agents.

Microencapsulated formulations (microcapsule suspensions CS) or other controlled release formulations may also be used, particularly for slow release over a period of time, and for seed treatment.

Alternatively the compositions may be in the form of liquid preparations to be used as dips, irrigation additives or sprays, which are generally aqueous dispersions or emulsions of the active ingredient in the presence of one or more known wetting agents, dispersing agents or emulsifying agents (surface active agents). The compositions which are to be used in the form of aqueous dispersions or emulsions are generally supplied in the form of an emulsifiable concentrate (EC) or a suspension concentrate (SC) containing a high proportion of the active ingredient or ingredients. An EC is a homogeneous liquid composition, usually containing the active ingredient dissolved in a substantially non-volatile organic solvent. An SC is a fine particle size dispersion of solid active ingredient in water. To apply the concentrates they are diluted in water and are usually applied by means of a spray to the area to be treated. For agricultural or horticultural purposes, an aqueous preparation containing between 0.0001% and 0.1% by weight of the active ingredient (approximately equivalent to from 5-2000g/ha) is particularly useful.

Suitable liquid solvents for ECs include methyl ketone, methyl isobutyl ketone, cyclohexanone, xylenes, toluene, chlorobenzene, paraffins, kerosene, white oil, alcohols, (for example, butanol), methylnaphthalene, trimethylbenzene, trichloroethylene, N-methyl-2-pyrrolidone and tetrahydrofurfuryl alcohol (THFA).

Wetting agents, dispersing agents and emulsifying agents may be of the cationic, anionic or non-ionic type. Suitable agents of the cationic type include, for example, quaternary ammonium compounds, for example cetyltrimethyl ammonium bromide. Suitable agents of the anionic type include, for example, soaps, salts of aliphatic monoesters of sulfuric acid, for example sodium lauryl sulfate, salts of sulfonated aromatic compounds, for example sodium dodecylbenzenesulfonate, sodium, calcium or ammonium lignosulfonate, or butylnaphthalene sulfonate, and a mixture of the sodium salts of diisopropyl- and triisopropylnaphthalene sulfonates. Suitable agents of the non-ionic type include, for example, the condensation products of ethylene oxide with fatty alcohols such as oleyl alcohol or cetyl alcohol, or with alkyl phenols such as octyl phenol, nonyl phenol and octyl cresol. Other non-ionic agents are the partial esters derived from long chain fatty acids and hexitol anhydrides, the condensation products of the said partial esters with ethylene oxide, and the lecithins.

These concentrates are often required to withstand storage for prolonged periods and after such storage, to be capable of dilution with water to form aqueous preparations which remain homogeneous for a sufficient time to enable them to be applied by conventional spray equipment. The concentrates may contain 1-85% by weight of the active ingredient or ingredients. When diluted to form aqueous preparations such preparations may contain varying amounts of the active ingredient depending upon the purpose for which they are to be used.

The compounds of formula (I) may also be formulated as powders (dry seed treatment DS or water dispersible powder WS) or liquids (flowable concentrate FS, liquid seed treatment LS), or microcapsule suspensions CS for use in seed treatments. The formulations can be applied to the seed by standard techniques and through conventional seed treaters. In use the compositions are applied to the nematodes, to the locus of the nematodes, to the habitat of the nematodes, or to growing plants liable to infestation by the nematodes, by any of the known means of applying pesticidal compositions, for example, by dusting, spraying, or incorporation of granules.

The compounds of the invention may be the sole active ingredient of the composition or they may be admixed with one or more additional active ingredients such as nematocides or agents which modify the behaviour of nematodes such as hatching factors, insecticides, synergists, herbicides, fungicides or plant growth regulators where appropriate.

Suitable additional active ingredients for inclusion in admixture with the compounds of the invention may be compounds which will broaden the spectrum of activity of the compounds of the invention or increase their persistence in the location of the pest. They may synergise the activity of the compound of the invention or complement the activity for example by increasing the speed of effect or overcoming repellency. Additionally multi-component mixtures of this type may help to overcome or prevent the development of resistance to individual components.

The particular additional active ingredient included will depend upon the intended utility of the mixture and the type of complementary action required. Examples of suitable insecticides include the following:

- a) Pyrethroids such as permethrin, esfenvalerate, deltamethrin, cyhalothrin in particular lambda-cyhalothrin, bifenthrin, fenpropathrin, cyfluthrin, tefluthrin, fish safe pyrethroids for example ethofenprox, natural pyrethrin, tetramethrin, s-bioallethrin, fenfluthrin, prallethrin and 5-benzyl-3-furylmethyl-(E)-(1R,3S)-2,2-dimethyl-3-(2-oxothiolan-3-ylidenemethyl) cyclopropane carboxylate;

- b) Organophosphates such as profenofos, sulprofos, methyl parathion, azinphos-methyl, demeton-s-methyl, heptenophos, thiometon, fenamiphos, monocrotophos, triazophos, methamidophos, dimethoate, phosphamidon, malathion, chlorpyrifos, phosalone, terbufos, fensulfothion, fonofos, phorate, phoxim, pyrimiphos-methyl, pyrimiphos-ethyl, fenitrothion or diazinon;
- c) Carbamates (including aryl carbamates) such as pirimicarb, cloethocarb, carbofuran, furathiocarb, ethiofencarb, aldicarb, thiofurox, carbosulfan, bendiocarb, fenobucarb, propoxur or oxamyl;
- d) Benzoyl ureas such as triflumuron, or chlorfluazuron;
- e) Organic tin compounds such as cyhexatin, fenbutatin oxide, azocyclotin;
- f) Macrolides such as avermectins or milbemycins, for example such as abamectin, ivermectin and milbemycin;
- g) Hormones and pheromones;
- h) Organochlorine compounds such as benzene hexachloride, DDT, endosulphan, chlordane or dieldrin;
- i) Amidines, such as chlordimeform or amitraz
- j) Fumigant agents;
- k) Nitromethylenes such as imidacloprid.

In addition to the major chemical classes of insecticide listed above, other insecticides having particular targets may be employed in the mixture if appropriate for the intended utility of the mixture. For instance selective insecticides for particular crops, for example stemborer specific insecticides for use in rice such as cartap or buprofezin can be employed. Alternatively insecticides specific for particular insect species/stages for example ovo-larvicides such as clofentezine, flubenzimine, hexythiazox and tetradifon, motilicides such as dicofol or propargite, general acaricides such as bromopropylate, chlorobenzilate, or growth regulators such as hydramethylnon, cyromazine, methoprene, chlorfluazuron and diflubenzuron may also be included in the compositions.

Examples of suitable synergists for use in the compositions include piperonyl butoxide, sesamax, safrozan and dodecyl imidazole.

Suitable herbicides, fungicides and plant-growth regulators for inclusion in the compositions will depend upon the intended target and the effect required.

An example of a rice selective herbicides which can be included is propanil, an example of a plant growth regulator for use in cotton is "Pix", and examples of fungicides for use in rice include blasticides such as blasticidin-S. The ratio of the compound of the invention to the other active ingredient in the composition will depend upon a number of factors including type of target, effect required from the mixture etc. However in general, the additional active ingredient of the composition will be applied at about the rate as it is usually employed, or at a slightly lower rate if synergism occurs.

EXAMPLE 6

In order to illustrate the nematicidal properties of the compounds of formula (I), the in vitro activity of compounds according to the invention against the root-knot nematode, Meloidogyne incognita, was evaluated by placing an aqueous suspension of freshly hatched (0-24 hours old), second stage juveniles into a solution of candidate nematicide over a series of test rates. Test Chemicals were diluted to double the rate required in 1% of a mixture of ethanol and acetone (1:1) and 99% deionised water. 0.5 cm³ of chemical solution was then mixed with 0.5 cm³ of the nematode suspension (at 200 nematodes/cm³) in a glass vial. Each chemical was evaluated in a series of treatments over a range of application rates of 1.65-0.02 ppm (parts per million). Each treatment was replicated twice. The vials were capped and left for 72 hours in a constant environment room at 23°C. The numbers of dead and live nematodes were assessed visually for each treatment using a stereomicroscope. Results are express in Table A in terms of the observed mortality at the given application rate of the test chemical (meaned over the replicate treatments). Where appropriate, the results for a test chemical were statistically analysed to generate LC₅₀ and LC₉₀ values (the concentration of test chemical causing 50% and 90% mortality respectively).

TABLE A

Compound No	Mortality (%)	Rate (ppm)	LC ₅₀ (ppm)	LC ₉₀ (ppm)
XXIV.1	90.1	1.65		
XXIV.1	77.7	0.55		
XXIV.1	27.8	0.185	0.34	1.13
XXIV.1	5.1	0.06		
XXIV.1	2.8	0.02		
XXII.1	96.9	1.65		

XXII.1	94.7	0.55		
XXII.1	92.9	0.185	0.013	0.156
XXII.1	89.6	0.06		
XXII.1	54.2	0.02		

EXAMPLE 7

This example demonstrates granules suitable for soil application. The granules can be made by standard techniques such as impregnation, coating, extrusion or agglomeration.

	<u>%w/w</u>
Impregnated granule : Active ingredient	5
Wood Rosin	2.5
Gypsum granules (20-40 mesh)	92.5
Coated granule : Active ingredient	0.5
`Solvesso'* 200	0.4
Calcium carbonate granules (30-60 mesh)	99.1
Slow release granule : Active ingredient	10
Polyvinylacetate/vinyl chloride copolymer latex	5
Attapulgus granules	85

EXAMPLE 8

This Example demonstrates formulations for use as a spray. The compounds can be formulated as wettable powders, water dispersible granules, suspension concentrates, emulsifiable concentrates, emulsions or microcapsule suspensions for application diluted in water.

	<u>g/l</u>
Emulsifiable concentrate: Active ingredient	250
Calcium dodecyl- benzene sulfonate	50
Nonyl phenol ethoxylate	50
Alkylbenzene solvent	to 1 litre

		<u>%w/w</u>
Wettable powder :	Liquid active ingredient	40
	lignosulfonate dispersant	5
	silica	25
	sodium lauryl sulfate	3
	china clay (kaolin)	27
Microcapsule suspension:	Liquid active ingredient	250
	toluene diisocyanate	10
	polymethylene polyphenyl isocyanate	20
	nonyl phenol ethoxylate	6
	lignosulfonate dispersant	15
	xanthan gum	1
	bentonite	10
	biocide 'Proxel'*	0.1
	sodium carbonate	5
	water	to 1 litre

The microcapsule suspensions can be used as a spray, soil drench or as an intermediate to prepare slow release granules for application to the soil.

		<u>g/l</u>
Suspension concentrate :	Solid active ingredient	400
	lignosulfonate dispersant	50
	sodium lauryl sulfate	30
	xanthan gum	1
	biocide 'Proxel'*	0.1
	bentonite	10
	water	to 1 litre

EXAMPLE 9

This Example demonstrates formulations suitable for use as seed treatments in conventional application machinery.

		<u>%w/w</u>
Dry seed treatment :	Active ingredient	20

dodecyl benzene	3
Rubine Toner (dyestuff)	2.7
Talc	53.3
Silica	to 100%

The suspension concentrate and microcapsule suspension of Example 10 can be used as flowable concentrates for seed treatment.

EXAMPLE 10

This Example demonstrates the formulation of the compounds for electrostatic spraying.

	<u>g/l</u>
Active ingredient	200
N-methylpyrrolidone	50
Soyabean oil	120
`Solvesso'* 200	to 1 litre

EXAMPLE 11

This Example demonstrates a formulation suitable for use as a bait.

	<u>%w/w</u>
Active ingredient	0.25
Icing sugar	99.65
Butylated hydroxy toluene	0.10

EXAMPLE 12

This Example demonstrates a formulation suitable for use as a bolus.

	<u>mg</u>
Active ingredient	1300
Sodium starch glycollate	300
Microcrystalline cellulose	1200
Lactose	2920
Povidone	250
Magnesium stearate	30

EXAMPLE 13

This Example demonstrates a formulation suitable for use as an injectable suspension.

	<u>mg</u>
Active ingredient	40

Sodium metabisulfite	1
Polysorbate 80	1
Sodium methyl hydroxybenzoate	2
Water to	1ml

EXAMPLE 14

This Example demonstrates a formulation suitable for use as an injectable solution.

	mg
Active ingredient	20
Sodium citrate	6
Citric acid	1
Sodium chloride	7
Chlorcresol	1
Water to	1ml

EXAMPLE 15

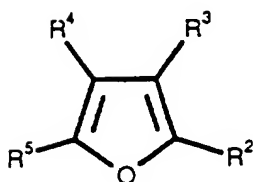
This Example demonstrates a formulation suitable for use as an oral suspension.

	g
Active ingredient	100.0
Polysorbate 80	2.0
Xanthan gum	5.0
Colloidal silicon dioxide	10.0
Methyl hydroxybenzoate	1.5
Citric acid monohydrate	10.0
Sodium citrate	10.0
Purified water to	1000.0ml

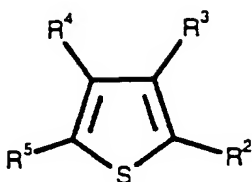
Claims

1. A compound of formula (I),
 $R-S(O)_nCH_2CH_2C(CH_3)=CF_2$

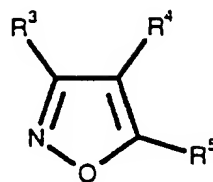
or a salt thereof, wherein n is 0, 1 or 2; and R is a group of formula (II) to (XXIV),
 wherein:



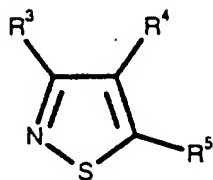
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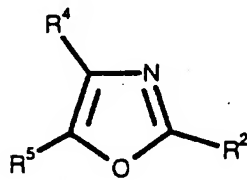
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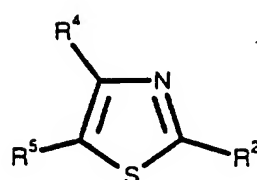
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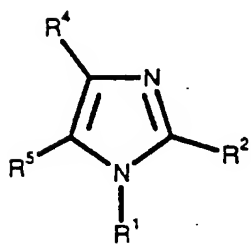
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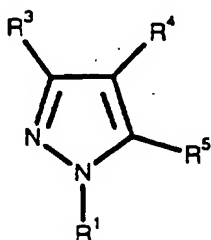
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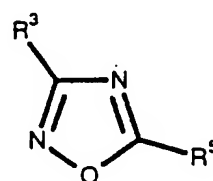
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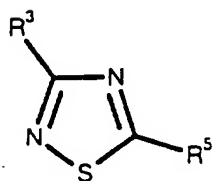
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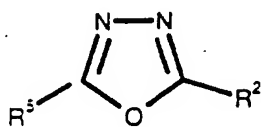
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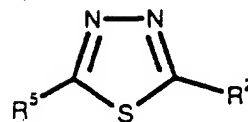
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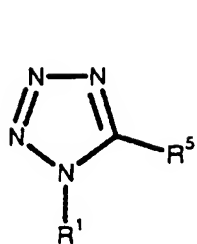
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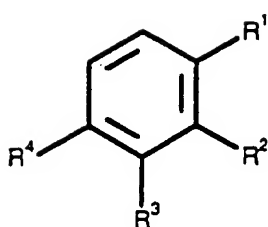
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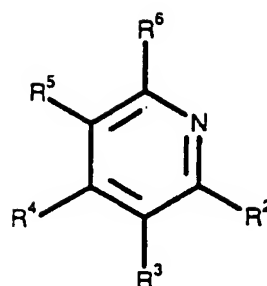
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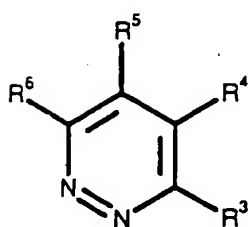
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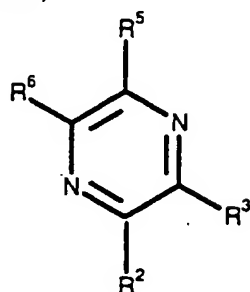
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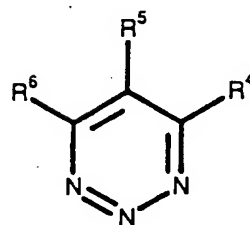
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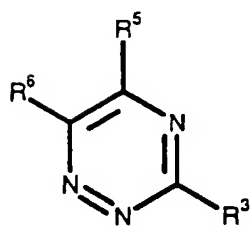
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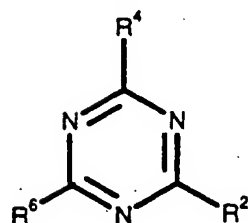
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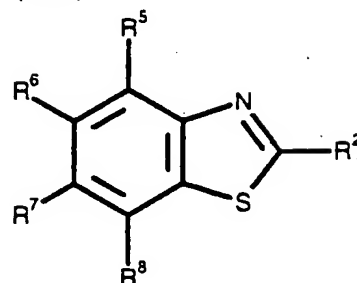
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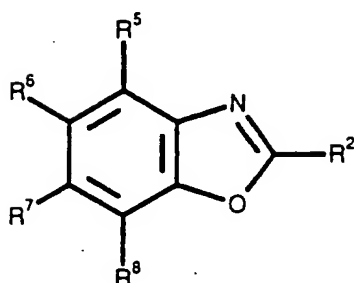
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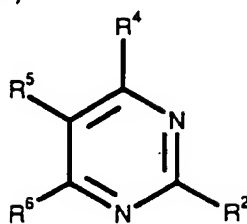
(XXI)



(XXII)



(XXIII)



(XXIV)

the $S(O)_nCH_2CH_2C(CH_3)=CF_2$ group is at least one of R1 (when attached to a carbon atom), R2, R3, R4, R5, R6, R7 or R8:

R1 (when attached to a carbon atom), R2, R3, R4, R5, R6, R7 and R8 are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl.

alkynyl, cycloalkyl, alkylcycloalkyl, alkoxy, alkenyloxy, alkynyloxy, hydroxyalkyl, alkoxyalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted heteroaryl, optionally substituted heteroarylalkyl, optionally substituted aryloxy, optionally substituted arylalkoxy, optionally substituted aryloxyalkyl, optionally substituted heteroaryloxy, optionally substituted heteroarylalkoxy, optionally substituted heteroaryloxyalkyl, haloalkyl, haloalkenyl, haloalkynyl, haloalkoxy, haloalkenyloxy, haloalkynyloxy, halogen, hydroxy, cyano, nitro, -NR₉R₁₀, -NR₉COR₁₀, -NR₉CSR₁₀, -NR₉SO₂R₁₀, -N(SO₂R₉)(SO₂R₁₀), -COR₉, -CONR₉R₁₀, -alkylCONR₉R₁₀, -CR₉NR₁₀, -COOR₉, -OCOR₉, -SR₉, -SOR₉, -SO₂R₉, -alkylSR₉, -alkylSOR₉, -alkylSO₂R₉, -OSO₂R₉, -SO₂NR₉R₁₀, -CSNR₉R₁₀, -SiR₉R₁₀R₁₀, -OCH₂CO₂R₉, -OCH₂CH₂CO₂R₉, -CONR₉SO₂R₁₀, -alkylCONR₉SO₂R₁₀, -NHCONR₉R₁₀, -NHCSNR₉R₁₀, or an adjacent pair of R₁, R₂, R₃, R₄, R₅, R₆, R₇ and R₈ when taken together form a fused 5- or 6-membered carbocyclic or heterocyclic ring;

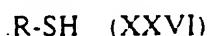
R₁ (when attached to a nitrogen atom) is hydrogen, optionally substituted alkyl, cycloalkyl, alkylcycloalkyl, hydroxyalkyl, alkoxyalkyl, optionally substituted aryl, optionally substituted arylalkyl, optionally substituted aryloxyalkyl, optionally substituted heteroaryl, optionally substituted heteroarylalkyl, optionally substituted heteroaryloxyalkyl, haloalkyl, hydroxy, cyano, nitro, -NR₉R₁₀, -NR₉COR₁₀, -NR₉CSR₁₀, -NR₉COOR₁₀, -NR₉SO₂R₁₀, -N(SO₂R₉)(SO₂R₁₀), -COR₉, -CONR₉R₁₀, -alkylCONR₉R₁₀, -CR₉NR₁₀, -COOR₉, -OCOR₉, -SOR₉, -SO₂R₉, -alkylSR₉, -alkylSOR₉, -alkylSO₂R₉, -OSO₂R₉, -SO₂NR₉NR₁₀, -SR₉, -SOR₉, -SO₂R₉, -CSNR₉R₁₀, -SiR₉R₁₀R₉, -OCH₂CO₂R₉, -OCH₂CH₂CO₂R₉, -CONR₉SO₂R₁₀, -alkylCONR₉SO₂R₁₀, -NHCOR₉R₁₀, or -NHCSR₉R₁₀; and

R₉, R₁₀ and R₁₁ are each independently hydrogen, optionally substituted alkyl, optionally substituted alkenyl, alkynyl, optionally substituted aryl, optionally substituted arylalkyl, haloalkyl, haloalkenyl, haloalkynyl, halogen, or hydroxy.

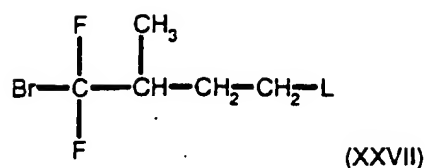
2. A compound according to claim 1, wherein: R₁ (when attached to a carbon atom) to R₈ are each independently hydrogen; nitro; halogen; cyano; -CH=NOH; C₁-4 alkyl; C₁-4 haloalkyl; C₁-4 alkenyl; C₁-4 haloalkenyl; cyclopropyl; hydroxy; C₁-4 alkoxy; C₂-4 alkoxyalkyl; -COOH; C₂-4 alkoxycarbonyl; C₂-4 haloalkenyloxycarbonyl; -CONH₂; mono or di-C₁-2 alkylaminocarbonyl; C₂-4 alkanecarbonyl; -CONHSO₂ C₁-4 alkyl.

preferably -CONHSO₂CH₃; phenyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl, C1-4 alkoxy or aminosulfonyl; benzyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl or C1-4 alkoxy; phenoxy optionally mono- or di- substituted with groups independently chosen from halogen, cyano, C1-4 alkyl or C1-4 alkoxy; amino optionally mono- or di- substituted with C1-4 alkyl groups; -SH; C1-4 alkylthio; benzylthio optionally mono- or di- substituted with groups independently chosen from halogen or C1-4 haloalkyl; C1-4 alkenylthio; C2-4 haloalkenylthio; a second S(O)_nCH₂CH₂CH=CF₂ group; C1-4 alkanesulfonyl; C1-4 haloalkanesulfonyl; fluorosulfonyl; mono- or di- C1-4 alkylsulfamoyl; a 5 or 6 membered heteroaryl group, for example, furyl, pyrazinyl, pyridinyl or thienyl, optionally substituted with halogen; or any adjacent pair forms a fused 5- or 6- carbocyclic or heterocyclic ring; and R₁ (when attached to a nitrogen atom) is hydrogen; nitro; cyano; -CH=NOH; C1-4 alkyl; C1-4 haloalkyl; cyclopropyl; hydroxy; -COOH; C2-4 alkoxy carbonyl; C2-4 haloalkenyloxy carbonyl; -CONH₂; mono or di-C1-2 alkylaminocarbonyl; C2-4 alkanecarbonyl; -CONHSO₂ C1-4 alkyl, preferably -CONHSO₂CH₃; phenyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl, C1-4 alkoxy or aminosulfonyl; benzyl optionally mono- or di- substituted with groups independently chosen from halogen, nitro, C1-4 alkyl or C1-4 alkoxy; phenoxy optionally mono- or di- substituted with groups independently chosen from halogen, cyano, C1-4 alkyl or C1-4 alkoxy; amino optionally mono- or di- substituted with C1-4 alkyl groups; -SH; C1-4 alkylthio; benzylthio optionally mono- or di- substituted with groups independently chosen from halogen or C1-4 haloalkyl; C1-4 alkenylthio; C2-4 haloalkenylthio; a second S(O)_nCH₂CH₂C(CH₃)=CF₂ group; C1-4 alkanesulfonyl; C1-4 haloalkanesulfonyl; fluorosulfonyl; mono- or di- C1-4 alkylsulfamoyl; a 5 or 6 membered heteroaryl group, for example, furyl, pyrazinyl, pyridinyl or thienyl, optionally substituted with halogen.

3. A process for the preparation of a compound of either of claims 1 and 2, where n is 0, comprising reacting a compound of formula (XXVI)

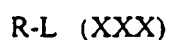


with a compound of formula (XXVII)

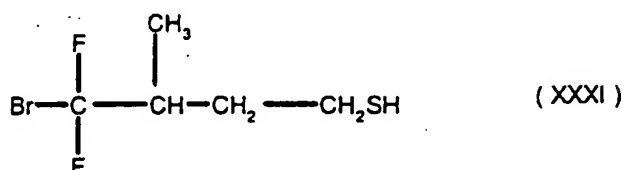


where R is as defined in claims 1 and 2, and L is a good leaving group, and then conducting a dehydrobromination step.

4. A process for the preparation of a compound of either of claims 1 and 2, where n is 0, comprising reacting a compound of formula (XXX)



with a compound of formula (XXXI)



where R is as defined in claims 1 and 2, and L is a good leaving group, and then conducting a dehydrobromination step.

5. A process for the preparation of a compound of either of claims 1 and 2, when n is 1 or 2, which comprises oxidation of the correspondingly substituted compound of formula (I) when n is 0.
6. An agricultural composition comprising a compound of either of claims 1 and 2 as the active ingredient in admixture with an agriculturally acceptable diluent or carrier.
7. An agricultural composition according to claim 6, further comprising a surface active material.
8. An agricultural composition according to either of claims 6 and 7, further comprising at least one other active ingredient which is an insecticide, fungicide, bactericide, acaricide or other biologically active compound.

9. A process for preparing an agricultural composition of any one of claims 6 to 8, comprising admixing the compound of either of claims 1 and 2 and the agriculturally acceptable diluent or carrier.
10. A method for killing or controlling nematode, insect or acarid pests comprising applying a compound of either of claims 1 and 2, or a composition of any one of claims 6 to 8, to the pests, their habitat, or a plant susceptible to attack by the pests.

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Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report)

Application number
 GB 9518703.5

Relevant Technical Fields

(i) UK Cl (Ed.N) C2C (CQL, CQM, CQS, CQN, CQT)

(ii) Int Cl (Ed.6) C07C, C07D

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii) ONLINE: CAS ONLINE

Search Examiner
 P N DAVEY

Date of completion of Search
 6 NOVEMBER 1995

Documents considered relevant following a search in respect of Claims :-
 1-10

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Category	Identity of document and relevant passages	Relevant to claim(s)
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